







# 7. KAHEKON ULUSLARARASI KARADENIZ AILE HEKIMLIĞI KONGRESI



11 - 14 Ekim 2018 - Ramada Otel Trabzon www.2018kahekon.com









# İÇİNDEKİLER

| GENEL BİLGİLER    | 3   |
|-------------------|-----|
| BİLİMSEL PROGRAM  | 5   |
| POSTER BİLDİRİLER | 10  |
| SÖZEL BİLDİRİLER  | 27  |
| KONUŞMA ÖZETLERİ  | 154 |

# KONGRE BAŞKANLARI

Dr. Ketevan JUGHELİ Dr. Hakan UZUN Dr. Turan SET

# KONGREYİ DESTEKLEYENLER

Makbule KOÇAK
Türkiye Cumhuriyeti Batum Başkonsolosu

Avtandil MİKATSADZE Gürcistan Cumhuriyeti Trabzon Başkonsolosu

Zaal MİKELADZE Gürcistan Cumhuriyeti Acara Özerk Cumhuriyeti Sağlık Bakanı

Av. Halil ŞEN T.C Sağlık Bakanlığı Halk Sağlığı Genel Müdürlüğü Daire Başkanı

Yavuz ATEŞ T.C Sağlık Bakanlığı Halk Sağlığı Genel Müdürlüğü Daire Başkanı

Dr. Köksal HAMZAOĞLU T.C Sağlık Bakanlığı Trabzon Halk Sağlığı Başkanı

> Dr. Şenol ATAKAN AHEF Başkanı

KONGRE SEKRETERLERİ Dr. Burhan YILMAZ Dr. Elif ATEŞ

# KONGRE DÜZENLEME KURULU

Dr. Emre ÖZEL
Dr. Muhsin Ertuğrul ŞEN
Dr. Halil İbrahim KÜÇÜK
Dr. Osman Turan ÇAKAR
Dr. Canan TANRIVER
Dr. Ali YILMAZ
Dr. Vusule YAŞAR
Dr. Teona VARSHALOMİDZE

## BİLİMSEL KURUL

Dr. Ali YILMAZ(Türkiye)

Dr. Ayten ALİEVA (Azerbaycan)

Dr. Arzu AYRALER (Türkiye)

Dr. Burhan YILMAZ (Türkiye)

Dr. Canan TANRIVER (Türkiye)

Dr. Cüneyt ARDIÇ (Türkiye)

Dr. Elif ATEŞ (Türkiye)

Dr. Emre ÖZEL (Türkiye)

Dr. Eren ÇAĞLİYOR (Türkiye)

Dr. Guga KASHİBADZE (Gürcistan)

Dr. Gunay AGAYEVA (Azerbaycan)

Dr. Ilhame NİYAZOVA (Azerbaycan)

Dr. İftihar KÖKSAL (Türkiye)

Dr. Hakan UZUN (Türkiye)

Dr. Halil İbrahim KÜÇÜK (Türkiye)

Dr. H. Şenol ATAKAN (Türkiye)

Dr. Jemal PUTKARADZE (Gürcistan)

Dr. Konul SEFEROVA (Azerbaycan)

Dr. Köksal HAMZAOĞLU (Türkiye)

Dr. Lale ABDULLAHYEVA (Azerbaycan)

Dr. Leman XASAYEVA (Azerbaycan)

Dr. Merabi KVICARIDZE (Gürcistan)

Dr. Muhsin Ertuğrul ŞEN (Türkiye)

Dr. Mustafa Fevzi DİKİCİ (Türkiye)

Dr. Mustafa Kürşat ŞAHİN (Türkiye)

Dr. Narmin AKBAROVA (Azerbaycan)

Dr. Natavan ABBASOVA (Azerbaycan)

Dr. Nigar İSMAYİLOVA (Azerbaycan)

Dr. Nino PİRCHALAİŞVİLİ (Gürcistan)

Dr. Osman Turan ÇAKAR (Türkiye)

Dr. Reyhane HACİYEVA (Azerbaycan)

Dr. Samed SAMEDOV (Azerbaycan)

Dr. Teimuraz GOGİTİDZE (Gürcistan)

Dr. Teona VARSHALOMİDZE (Gürcistan)

Dr. Tijen ŞENGEZER (Türkiye)

Dr. Tınatin KİLASONİA (Gürcistan)

Dr. Turan SET (Türkiye)

Dr. Vepho ODİŞARİA (Gürcistan)

Dr. Vusale YAŞAR(Azerbaycan)

Dr. Yasemin ÇAYIR (Türkiye)

Dr. Zaza XACHİPERADZE (Gürcistan)

# BİLİMSEL PROGRAM

# 11 Ekim 2018 Perşembe - A SALONU

| Saat          | Konu ve Konuşmacılar  |  |  |  |
|---------------|---|--|--|--|
| 14.00 - 15.00 | Otele Giriş   |  |  |  |
|               | Türkiye-Azerbaycan-Gürcistan-Ukrayna Aile Hekimliği Çalıştayı   |  |  |  |
|               | Prof. Dr. Turan SET<br>KTÜ Tıp Fakültesi Aile Hekimliği Anabilim Dalı Başkanı   |  |  |  |
|               | Dr. Şenol ATAKAN<br>Aile Hekimleri Dernekleri Federasyonu Başkanı   |  |  |  |
|               | Dr. Hakan UZUN<br>Trabzon Aile Hekimleri Derneği Başkanı  |  |  |  |
| 15.00 - 18.00 | Av. Halil ŞEN<br>T.C Sağlık Bakanlığı Halk Sağlığı Genel Müdürlüğü Daire Başkanı  |  |  |  |
|               | Dr. Merabi KVİCARİDZE<br>Nazarishvili Kliniği Başhekimi   |  |  |  |
|               | Dr. Ketevan JUGHELİ<br>Gürcistan Cumhuriyeti Aile Doktor Eğitmen, Eğitim Merkezi Koordinatörü Kutaisi<br>D. Nazarishvili Aile Hekimliği ve Aile Doktor Eğitim Merkezi |  |  |  |
|               | Dr. Vusale YAŞAR<br>Azerbaycan Unikal Klinika   |  |  |  |
| 20.00 - 24.00 | Akşam Yemeği  |  |  |  |

# 12 Ekim 2018 Cuma - A SALONU

| Saat          | Oturum Başkanı  | Konu ve Konuşmacılar   |
|---------------|---|--|
|               |   | Açılış ve Açılış Konuşmaları<br>Dr. Hakan UZUN<br>Trabzon Aile Hekimleri Derneği Başkanı   |
|               |   | Prof. Dr. Turan SET<br>KTÜ Tıp Fakültesi Aile Hekimliği Anabilim Dalı<br>Başkanı   |
| 09.00 - 10.00 |   | Dr. Ketevan JUGHELİ<br>Gürcistan Cumhuriyeti, Kutaisi D. Nazarishvili<br>Aile Hekimliği ve Aile Doktor Eğitim Merkezi<br>Koordinatörü              |
|               |   | Dr. Köksal HAMZAOĞLU<br>Trabzon İl Sağlık Müdürlüğü Halk Sağlığı Başkanı   |
|               |   | Dr. Şenol ATAKAN<br>Aile Hekimleri Dernekleri Federasyonu Başkanı  |
|               |   | Av. Halil ŞEN<br>T.C Sağlık Bakanlığı Halk Sağlığı Genel<br>Müdürlüğü Daire Başkanı  |
| 10.00 - 10.15 |   | Çay-Kahve Arası  |
|               |   | Aile Hekimliği Paneli  Dr. Ketevan JUGHELİ Gürcistan Cumhuriyeti,Kutaisi D. Nazarishvili Aile Hekimliği ve Aile Doktor Eğitim Merkezi Koordinatörü |
| 10.15 - 11.45 | Prof. Jemal PUTKARADZE  Dr. Hakan UZUN  Dr. Merabi KVİCARİDZE  Dr. Teona VARŞALOMİDZE | Prof. Dr. Turan SET KTÜ Tıp Fakültesi Aile Hekimliği Anabilim Dalı Başkanı  Dr. Şenol ATAKAN Aile Hekimleri Dernekleri Federasyonu Başkanı         |
|               |   | Yavuz ATEŞ<br>T.C Sağlık Bakanlığı Halk Sağlığı Genel<br>Müdürlüğü Bütçe ve Projeler Dairesi Başkanı   |
|               |   | Av. Halil ŞEN<br>T.C Sağlık Bakanlığı Halk Sağlığı Genel<br>Müdürlüğü Daire Başkanı  |

| 11.45 - 12.00 | Ara   |  |  |  |  |  |
|---------------|---|--|--|--|--|--|
|               |   | UYDU SEMPOZYUMU  |  |  |  |  |
| 12.00 - 13.00 | Dr. Burhan YILMAZ<br>Dr.İlhame NİYAZOVA       | <b>İmuneks</b> Farma<br>ilaç Sanayi ve Ticaret A.Ş.<br>Bağışıklık Sistemi ve Beta Glukan   |  |  |  |  |
|               |   | Dr. Eren ÇAĞLIYOR  |  |  |  |  |
| 13.00 - 14.00 |   | Öğle Yemeği  |  |  |  |  |
| Saat          | Oturum Başkanı                                | Konu ve Konuşmacılar   |  |  |  |  |
| 14.00 - 15.00 | Dr. Ali YILMAZ<br>Dr. Ayten ALIEVA            | UYDU SEMPOZYUMU  """  Mustafa Nevzat*  Olgularla Bel Ağrısına Yaklaşım  Prof. Dr. İlknur AKTAŞ   |  |  |  |  |
| 15.00 - 15.15 |   | Ara  |  |  |  |  |
| 15.15 - 16.00 | Dr. Emre ÖZEL<br>Dr. Gunay AGAYEVA            | Kılavuzlar Eşliğinde Hipertansiyon  Dr. Öğr. Üyesi Cüneyt ARDIÇ  RTE Üniversitesi Aile Hekimliği Anabilim Dalı  Başkanı  |  |  |  |  |
| 16.00 - 16.15 | Ara   |  |  |  |  |  |
| 16.15 - 17.00 | Dr. Teona VARŞALOMİDZE<br>Dr. Ketevan JUGHELİ | Aile Hekimliğinde Sık Karşılaşılan Ürolojik<br>Hastalıklar ve Tedavisi<br>Dr. Merabi KVİCARİDZE  |  |  |  |  |
|               |   | Nazarishvili Kliniği Başhekimi   |  |  |  |  |
| 17.00 - 17.15 |   | Çay-Kahve Arası  |  |  |  |  |
| 17.15 - 18.00 | Dr. Muhsin Ertuğrul ŞEN                       | Aile Hekimliğinde Hiperlipidemi Tedavisi  Dr. Könül SEFEROVA   |  |  |  |  |
|               | Dr. Lale ABDULLAYEVA                          | FHN Tıbbi Bölüm Amiri  |  |  |  |  |
| 18.00 - 18.15 |   | Ara  |  |  |  |  |
| 18.15 - 19.00 | Dr. Canan TANRIVER<br>Dr. Nino PİRCHALAİŞVİLİ | Aile Hekimliğinde Diyabetik Ayak Tedavisi Dr. Vusale YAŞAR Azerbaycan Unikal Klinika Aile Hekimliğinde Akne Tedavisi Dr. Narmin AKBAROVA Azerbaycan Unikal Klinika |  |  |  |  |
| 20.00 - 24.00 |   | Akşam Yemeği   |  |  |  |  |

# 12 Ekim 2018 Cuma - B SALONU

| Saat          | Oturum Başkanı              | Konu ve Konuşmacılar |
|---------------|-----------------------------|----------------------|
| 15.00 - 19.00 | Dr. Öğr. Üyesi Elif ATEŞ    | Sözel Sunumlar       |
| 13.00 - 19.00 | Dr. Öğr. Üyesi Cüneyt ARDIÇ |                      |

# 13 Ekim 2018 Cumartesi - A SALONU

| Saat          | Oturum Başkanı                              | Konu ve Konuşmacılar  |  |  |  |  |
|---------------|---|---|--|--|--|--|
|               | Dr. H. İbrahim KÜÇÜK                        | Süt Çocuklarında Tamamlayıcı Beslenme   |  |  |  |  |
| 09.00 - 10.00 | Dr. Natavan ABBASOVA                        | Dr. Öğr. Üyesi Elif ATEŞ<br>KTÜ Tıp Fakültesi Aile Hekimliği Anabilim Dalı                            |  |  |  |  |
| 10.00 - 10.15 |   | Çay-Kahve Arası   |  |  |  |  |
|               | Dr. Osman Turan ÇAKAR                       | Johnson Johnson   |  |  |  |  |
| 10.15 - 11.45 | Dr. Leman XASAYEVA                          | Karadeniz'de Gemiler Değil Sigara Batsın  |  |  |  |  |
|               | Dr. Leman AASAIEVA                          | Dr. Filiz YÜKSEL<br>Çankırı Kurşunlu İlçe Devlet Hastanesi  |  |  |  |  |
| 11.45 - 12.00 | Ara   |   |  |  |  |  |
| 12.00 - 13.30 | Dr. Muhsin Ertuğrul ŞEN  Dr. Könül SEFEROVA | Aile Hekimliğinde Pratik EKG<br>Prof. Dr. Turan SET<br>KTÜ Tıp Fakültesi Aile Hekimliği Anabilim Dalı |  |  |  |  |
| 12.20 14.20   |   | Başkanı   |  |  |  |  |
| 13.30 - 14.30 |   | Öğle Yemeği   |  |  |  |  |
| 14.30 - 15.30 | Dr. Öğr. Üyesi Arzu AYRALER                 | Erişkin ve Risk Gruplarında Pnömokok Aşılaması<br>Prof. Dr. İftihar KÖKSAL                            |  |  |  |  |
| 14.50 - 15.50 | Dr. Vusule YAŞAR                            | KTÜ Tıp Fakültesi Enfeksiyon Hastalıkları<br>Anabilim Başkanı   |  |  |  |  |
| 15.30 - 15.45 |   | Ara   |  |  |  |  |
| 15.45 - 16.45 | Dr. Burhan YILMAZ                           | Aile Hekimliğinde Tip 2 Diyabet Yönetimi<br>Doç. Dr. Yasemin ÇAYIR                                    |  |  |  |  |
| 13.43 - 10.43 | Dr. Teona VARŞALOMİDZE                      | Atatürk Üniversitesi Tıp Fakültesi Aile Hekimliği<br>Anabilim Dalı Başkanı                            |  |  |  |  |
| 16.45 - 17.00 |   | Çay-Kahve Arası   |  |  |  |  |

| 17.00 - 17.45 | Dr. Ali YILMAZ<br>Dr. Nino PİRCHALAİŞVİLİ | Periyodik Sağlık Muayenesi  Prof. Dr. Mustafa Fevzi DİKİCİ 19 Mayıs Üniversitesi Tıp Fakültesi Aile Hekimliği Anabilim Dalı Başkanı |  |
|---------------|---|---|--|
| 17.45 - 18.00 |   | Ara   |  |
| 18.00 - 19.00 | Dr. Canan TANRIVER  Dr. Reyhane HACİYEVA  | Akılcı İlaç Kullanımı  Dr. Öğr. Üyesi Mustafa Kürşat ŞAHİN 19 Mayıs Üniversitesi Tıp Fakültesi Aile Hekimliği Anabilim Dalı         |  |
| 20.00 - 24.00 | Akşam Yemeği                              |   |  |

# 13 Ekim 2018 Cumartesi - B SALONU

| Saat          | Oturum Başkanı              | Konu ve Konuşmacılar |
|---------------|-----------------------------|----------------------|
| 10.00 10.00   | Dr. Öğr. Üyesi Elif ATEŞ    |                      |
| 12.00 - 19.00 | Dr. Öğr. Üyesi Cüneyt ARDIÇ | Sözel Sunumlar       |

# 14 Ekim 2018 Pazar - A SALONU

| Saat          | Oturum Başkanı  | Konu ve Konuşmacılar   |
|---------------|---|--|
| 09.00 - 10.00 | Dr. Öğr. Üyesi Elif ATEŞ  Dr. Öğr. Üyesi Cüneyt ARDIÇ | Sözel Sunumlar   |
| 10.00 - 10.15 |   | Ara  |
| 10.15 - 11.45 | Dr. Öğr. Üyesi Elif ATEŞ  Dr. Öğr. Üyesi Cüneyt ARDIÇ | Sözel Sunumlar   |
| 11.45 - 12.00 |   | Ara  |
| 12.00 - 13.00 | Yavuz ATEŞ<br>Dr. Samed SAMEDOV                       | Aile Hekimliğinde Hukuksal Sorunlar ve Çözüm<br>Önerileri<br>Dr. Hakan UZUN<br>Trabzon Aile Hekimleri Derneği Başkanı<br>Av. Halil ŞEN<br>T.C Sağlık Bakanlığı Halk Sağlığı Genel<br>Müdürlüğü Daire Başkanı |
| 13.00 - 13.30 |   | KAPANIŞ  |

# POSTER BİLDİRİLER

#### POSTER 1

PALYATİF BAKIM SERVİSİNDE MULTİPLE MYELOMA TANISI ALMIŞ VE PANKREATİT GELİŞMİŞ BİR OLGU A CASE DIAGNOSED AS MULTIPLE MYELOMA WITH PANKREATITIS IN PALLIATIVE CARE

Doç. Dr. Özgür ENGİNYURT, Ass. Dr. Tuğba DAĞAŞAN Ordu Üniversitesi Tıp Fakültesi Aile Hekimliği Anabilim Dalı

#### ÖZET:

Multipl miyelom (MM) plazma hücrelerinin monoklonal çoğalması ve bu hücrelerin monoklonal immünglobulin (M protein) sekresyonu ile giden bir neoplazidir. Multiple myelomadan öncelikle kemikte litik lezyonlar, hiperkalsemi, sedimantasyon yüksekliği, hiperglobulinemi gibi semptomlarla şüphelenilir ve klinik şüpheyle birlikte labaratuar ve kemik iliği incelemesi ile tanı konulur. Bu olguda yaygın kemik ağrısı, oral alım bozukluğu ve hiperkalsemisi olan 77 yaşında bayan hasta destek tedavisi ve tanı konulması amacıyla palyatif bakım servisimizde takip edilmek üzere polikliniğimize yönlendirilmişti. Ciddi hiperkalsemisi olan hasta servisimize yatırıldı. Hastanın yatışı sırasında multiple meyeloma teşhisi konuldu ve hiperkalsemiye bağlı pankreatit gelişti. Bu vaka ile palyatif bakım servislerinde destek tedavinin yanı sıra tanıya yönelik incelemerin de yapıldığını primer tanıların da palyatif servisinde koyulabildiği vurgulanmaya çalışılmıştır.

Anahtar kelimeler: multiple myeloma, pankreatit, palyatif bakım

#### ABSTRACT:

Multiple myeloma (MM) is a neoplasm with monoclonal proliferation of plasma cells and secretion of monoclonal immunoglobulin (M protein) from this cells. Multiple myeloma is suspected primarily by symptoms such as lytic lesions in bone, hypercalcemia, elevated sedimentation, hyperglobulinemia and diagnosis is made by laboratory and bone marrow examination with clinical suspicion. In this case a 77-year-old female patient with generalized bone pain, oral feeding impairment and hypercalcemia was referred to our polyclinic for palliative care in order to provide supportive care and diagnosis. The patient with severe hypercalcemia was admitted to our service. The patient was diagnosed with multiple myelome and during his admission hypercalcemia-induced pancreatitis has induced. In this case, it was emphasized that as well as supportive treatment in palliative care services, diagnostic examinations were performed in the palliative services.

Keywords: multiple myeloma, pancreatitis, palliative-care

#### GİRİŞ:

Multipl miyelom (MM) hematolojik maligniteler içinde görülme sıklığı %10, İnsidansı 100.000 de 4-5 olup ortalama başlangıç yaşı 66'dır[1]. Multipl miyelom üç farklı klinik şekilde karşımıza çıkabilir (tipik, hafif zincir ve non-sekretuar tip). Klasik bulgular sedimantasyon yüksekliği, anemi , kemik ağrısı, hiperkalsemi, ve litik kemik lezyonlarıdır[2]. Hastaların %80'inde litik kemik lezyonları, osteopeni, osteoporoz veya patolojik kırıklar mevcuttur bu lezyonlar kemik surveyde saptanabilir[2]. Sedimantasyon belirgin şekilde artmıştır ve 100 mm/sa üzerinde olabilir[3]. Genellikle normokrom normositik anemi görülmekte olup hastaların %73'ünde tanı anında ve %97'sinde hastalık süresince görülür[2]. Böbrek tutulum oranı %48'dir[4]. Multipl miyelom (MM) plazma hücrelerinin terminal olarak diferansiye olmasıyla oluşan malign bir

hastalığıdır ve sık görülen hematolojik maligniteler arasındadır[5,6]. Tüm bunlarla birlikte multipl miyelom tanısında en önemli unsurun klinik ön tanı olduğu akılda tutulmalıdır[7]. Hastalığın tedavisi firsatçı enfeksiyonlardan ve ileri evrelerde patolojik kırıklardan korumak için verilen tedaviler ve ağrı tedavisini içine alan destek tedavisi, kemoterapi, hedefe yönelik tedavi, steroid tedavisi ve kemik iliği transplantasyonunu içine alır[8,9]. Hastalığın etyolojisi tam olarak bilinmemekle birlikte batıda kanser ile ilgili ölümlerin %1 ini oluşturmaktadır[10,11]. Bununla birlikte MM''nin bilinen kesin bir nedeni yoktur[12].

#### OLGU:

77 yaşında bayan hasta, halsizlik, yaygın kemik ağrısı ve hiperkalsemi nedeniyle ileri tetkik ve destek tedavisi alması için palyatif bakım servisine yatış amacıyla aile hekimliği polikliniğimize başvurdu. Hastanın geliş tetkikleri; WBC:6.74x103 /µl, RBC:4,5x106 /µl, HB:10,1g/l, MCV: 73.1fl, PLT:554.000, NEU:4,47103 /µl, MONO:0,69x103/UL EOS:0,1x103/UL, sedimentasyon: 79 mm/sa, triglisrerid 220 mg/dl, VLDL: 44, protein: 6 gr/dl, albümin: 2.7g/dl, GGT: 69U/L, T.Bilirubin: 0.13mg/dl, sodyum: 136mmol/L, kalsiyum:13,4mg/dl, CRP:1,18 mg/dl tesbit edildi. Hiperkalsemi için hidrasyon ve diüretik tedavisi yapıldı. Hiperkalsemi anemi ve yaygın kemik ağrısı olan hasta hematoloji bölümüne konsülte edildi. Hiperkalsemi için zolendronik asit yapıldı. Kontrastlı servikal, torakal ve lomber MR istendi, immunglobulinler ve immunfiksasyon ve Herpes Simplex tip 2 Ig G çalışıldı. Immunglobulin A:394.2 mg/dl, immunglobulin G:1225 mg/dl, immunglobulin M:88 mg/dl olarak geldi. Herpes SimplexTp 2 Ig G:0,06 (negatif) geldi. İdrar immun fiksasyonel ektroforezinde Kappa veya Lamda hafif zincirine rastlanamamıştır olarak geldi. Torakal vertebramr sonucu: T9, T10, T11 vertebra korpuslarında kemik medullada T1 A görüntülerde hipo, T2 A görüntülerde heterojen hipointensite, bu düzeylerde disk aralıklarında belirgin daralma, T11 vertebra korpusunda belirgin yükseklik kaybına neden olan kompresyon fraktürü ve T11 vertebra korpusuna eşlik eden paravertebral alanda solda 5x3, sağda 4x3 cm boyutunda yumuşak doku kitleleri izlenmiştir (kronik TBC spondilodiskit sekeli?, multipl myelom?). Takipte hastanın kalsiyum düzeyi düşmeye başlarken amilaz ve lipaz değeri yükselmeye başladı. Bilirubin düzeyi normal olan hastada kalsiyum yüksekliğine sekonder ödematöz pankreatit düşünüldü. Dahiliye ile konsülte edildi. Hastanın rejimi stoplandı. IV hidrasyon yapıldı. Takipte amilaz ve lipaz düzeyi gerileyen hasta hematoloji ile tekrar görüşülerek multipl myelom teşhisi yüksek ihtimal düşünülmekle birlikte kemik iliği biopsisi planlandı.

#### TARTISMA:

Palyatif bakım merkezleri ülke genelinde yaygın olarak kurulmaya başlanmış olup hasta populasyonu terminal dönem kanser hastaları, yatağa bağımlı serebrovasküler hastalıkları olan ve Alzheimer hastalığı olan hastalara çoğunlukla hizmet verse de yeni tanı almış veya tanısı henüz netleşmemiş, genel durumunda veya beslenmesinde bozulma olan hastalara da hizmet vermektedir. Bu olguda servisimizde multipl myelom teşhisi konmuş bir hastayı tartıştık. Hiperkalsemi ve beslenme bozukluğu olan hastanın tetkik ve tedavisini tamamladığımızda multipl myeloma tanısına ulaştık. Hasta ileri tetkik ve tedaviyi kabul etmedi, Klinik olarak rahatlama sağlanınca taburcu edildi. Sonuç olarak; hiperkalsemi, anemi ve beslenme bozukluğu olan hastalarda multipl myelon tanısı akılda tutulmalı ve bu tür hastalıklar aile hekimliği polikliniği ve palyatif servislerinde saptanabilmektedir.

#### KAYNAKLAR:

1. Phekoo KJ, Schey SA, Richards MA, Bevan DH, Bell S, Gillett D, et al. A population studyto define the incidence and survival of multiple myeloma in a National Health Service Region in UK. Br J Haematol 2004;127(3):299-304.

- 2. Kyle RA, Gertz MA, Witzig TE, Lust JA, Lacy MQ, Dispenzieri A, et al. Review of 1027 patients with newly diagnosed multiple myeloma. Mayo ClinProc 2003;78(1):21-33.
- 3. Alexandrakis MG, Passam FH, Ganotakis ES, Sfiridaki K, Xilouri I, Perisinakis K, et al. The clinical and prognostic significance of erythrocyte sedimentation rate (ESR), serum interleukin-6 (IL-6) and acutephase protein levels in multiplemyeloma. ClinLabHaematol 2003;25(1):41-6.
- 4. Winearls CG. Acute myeloma kidney. KidneyInt 1995;48(4):1347-61.
- 5. P.Kutlutürk Özdemir, S.Akın, E. Özdemir, M. Aliustaoğlu, Hafif Zincir Miyelomu JKartal TR 2013;24(2):118-121
- 6. Türk Hematoloji Derneği. Multipl Myelom Tedavi Kılavuzu, 2011, http://www.thd.org.tr/thdData/Books/77/multipl-miyelom-tedavi-kilavuzu.pdf (erişim tarihi: 10.02.2013).
- 7. Ündar L. Multipl Miyelom Tanı, 35. Ulusal Hematoloji Kongresi Kitapçığı Antalya-2009;89-92. http://www.thd.org.tr /thdData/Books/399/multipl-miyelom-tani-levent-undar.pdf, (erişim tarihi 19.03.2012).
- 8. Yale medical group. What is multiple myeloma? <a href="http://www.yalemedicalgroup.org">http://www.yalemedicalgroup.org</a> /stw/Page.asp?PageID=STW014574, (erişim tarihi: 20.06.2013)
- 9. Multipl Myelom hasta kılavuzu, Türk Hematoloji Derneği. 2011 <a href="http://www.thd.org.tr/THD\_Halk">http://www.thd.org.tr/THD\_Halk</a> /?sayfa=miyelom (erişim tarihi: 05.02.2012).
- 10. Coşkun S, Er Ö, İlhan O. Multiple Myeloma: Güncel Yaklaşımlar. Erciyes Tıp Dergisi 2001; 23(2):83-90.
- 11. Bataille R, Jean-LucHarousseau JL. Multiple myeloma. N Eng J Med 1997; 336:1657-1664 12. Enginyurt Ö. Aile Hekimliği polikliniğinde multipl myeloma tanısı almış bir olgu. Smyrna Tıp Dergisi 2011;1(1): 47-8.

#### POSTER 2

# SERUM FERRITIN CONCENTRATIONS AMONG VERY ELDERLY TURKISH SUBJECTS: IT IS BETTER THAN ESTIMATED

Dr.Öğretim Üyesi Arzu Ayraler<sup>1</sup>, Prof.Dr. Ahmet Cumhur Dülger<sup>2</sup>, Dr.Öğretim Üyesi Muhammed Ali Ayvaz<sup>3</sup>

- 1 Giresun Üniversitesi Aile Hekimliği Anabilimdalı/Giresun
- 2 Giresun Üniversitesi Gastroenteroloji Anabililimdalı/Giresun
- 3 Giresun Üniversitesi Gastroenteroloji Kliniği /Giresun

**AIM:**Serum ferritin concentration correlates with total body iron stores and is also a marker of iron deficiency anemia. The serum iron profiles in elderly subjects are not well established. The aim of this study was to provide an overview of the serum ferritin levels among very elderly Turkish subjects.

MATERIAL AND METHODS: Subjects older than 85 years old were retrospectively identified between 2017 and 2018 using official data of a tertiary center in Giresun city located at Turkish coastal region of Blacksea. Totally, 1301 subjects (834 female; meanage 87.3±3.7 years) were enrolled for the study. Hemoglobin, ferritin and albümin levels were determined by commercial devices. Results reported as mean±standard deviation. P <0.05 defined statistical significance.

**RESULTS:** The majority of subjects were female (64%). The mean hemoglobin concentration was  $12.01\pm1.93$  g/dl, mean serum ferritin concentration was  $192\pm327$  mg/dl and mean albümin level was  $3.8\pm0.76$  mg/dl. There was no statistically significant gender difference in terms of

hemoglobin, ferritin and albümine levels (allp>0.005). Furthermore, 8% of subjects had iron deficiency anemia defined as low serum ferritin concentrations with lower hemoglobin levels.

CONCLUSION: Among elderly Turkish citizens, the mean serum ferritin levels was higher than expected. It may have be enlinked to higher levels of health stantards in Turkishpopulation. Otherhand, higherferritin levels could be contributed to long survival time in elderly. Prevelance of iron deficiency anemia among Turkish elderly was found as closer as to elderly US citizens who seprevalence is 6%.

Keywords: Ferritin, Elderly subjects, Turkey

#### **POSTER 3**

PLASMA LIPID PROFILE AMONG VERY ELDERLY SUBJECTS WHO RESIDENT IN BLACK SEA REGION OF TURKEY

Dr.Öğretim Üyesi Arzu Ayraler<sup>1</sup>, Prof.Dr. Ahmet Cumhur Dülger<sup>2</sup>, Dr.Öğretim Üyesi Muhammed Ali Ayvaz<sup>3</sup>

- 1 Giresun Üniversitesi Aile Hekimliği Anabilimdalı /Giresun
- 2 Giresun Üniversitesi Gastroenteroloji Anabililimdalı/Giresun
- 3 Giresun Üniversitesi Gastroenteroloji Kliniği /Giresun

AIM: Dyslipidemia is a common event in elderly subjects. Patients who will benefit from statin theraphy defined as 1) adults with clinical ASCVD; 2) adults with an LDL  $\geq$ 190 mg/dl; 3) adults ages 40-75 years without ASCVD with diabetes mellitus (DM) and an LDL between 70 and 189 mg/dl; and 4) adults between ages 40 and 75 years without ASCVD or DM, with an LDL between 70 and 189 mg/dl, and an estimated 10-year risk for ASCVD of  $\geq$ 7.5%. Historical data suggest that low LDL cholesterol and high HDL cholesterol level shave positive impact on long-term survival, but there is no national data about very elderly subjects.

**METHODS:** We retrospectively evaluated hospital data from January 2018 to June 2018 on all subjects who aged above than 85 years. Patients who was taking statins were excluded from the study. At total, 652 subjects (400 female; the mean age was 87.2±2.6 years) were included for the study. We measured fasting lipid parameters using standart biochemical devices according to guidelines.

**RESULTS:** The mean level of HDL-C was  $43.6\pm14.5$  mg/dl; the mean level of LDL-C was  $100\pm38$  mg/dl and the mean level of plasma triglyceride was  $134\pm74$  mg/dl. There was no gender difference in terms of any lipid parameters (P>0.005).

CONCLUSION: Among Turkish elderly adults admitted to ourclinics, the mean LDL-C levels is not enough to start any cholesterol lowering drugs such as statins. Our data suggesting that these patients may be over-prioritized in terms of statinuse.

#### POSTER 4

PREVALENCE OF NON ALCOHOLIC HEPATOSTEATOSIS (NASH) IN PATIENTS WITH PARKINSON DISEASE (PD).

Selahattin Vural<sup>1</sup>, Muhammed Ali Ayvaz<sup>2</sup>, Tuğrul Kesicioğlu<sup>1</sup>, Selim Turfan<sup>4</sup>, Arzu Ayraler<sup>5</sup>, Ahmet Cumhur Dülger<sup>2</sup>

- 1 Giresun University Training and Research Hospital, Department of General Surgery, Giresun, Turkey
- 2 Giresun University Training and Research Hospital , Department of Gastroenterology, Giresun, Turkey
- 4 Giresun University Training and Research Hospital, Department of Emergency, Giresun, Turkey
- 5 Giresun University Training and Research Hospital, Family Medicine, Giresun, Turkey.

**AİM**: PD is the second most common neurodegenerative disorder among elderly population. It is also characterised by deep disturbances of fat metabolism in brainand serum as well. NASH is an obesity related liverdisease that affect so ver 50% of subjects in some western countriesand is characterised by a bright liver on ultrasonography with macro vesicular steatosis in liver biopsyspecimens. But, the association between the NASH and PD has never studied yet.

#### **METHODS:**

Patients with PD were retrospectively identified between 2017 and 2018 using hospital data of a tertiar yeenter in Giresun city located at Turkish coastal region of Blacksea. This study enrolled 47 sporadic PD patients (meanagewas 69±3.6 years; 27 female) and 53 age-, gender- and body massindex (BMI)-matchedcontrols (meanagewas 68±2.3 years; 23). We measured hepaticsteatosis using ultrasonography according to guidelines.

#### **RESULTS:**

At total, 47 patientswith PD; 11 (23%) had NASH. Amongthem; 2 had grade III, 3 had grade II and 5 had grade I NASH on ultrasonography of the abdomen. In control group; 11(20.7%) subjects tested positive for NASH on ultrasonography. There was no statistical difference between groups in terms of NASH (P>0.005).

#### **CONCLUSIONS:**

PD patient shave similar rates of NASH compared to age matched control group at abdominal ultrasonography. Otherhand, almost one of four patients with PD had ultrasonography-proven NASH and everyef fort should be made toprevent NASH in patients with PD.

KEY WORDS: NASH, Parkinson disease

#### POSTER 5

# SEROPREVALANCE OF HEPATITIS B SURFACE ANTIGEN IN VERY ELDERLY SUBJECTS IN COASTAL BLACKSEA REGION OF TURKEY

Dr.Öğretim Üyesi Arzu Ayraler<sup>1</sup>, Prof.Dr. Ahmet Cumhur Dülger<sup>2</sup>, Dr.Öğretim Üyesi Muhammed Ali Ayvaz<sup>3</sup>

- 1 Giresun Üniversitesi Aile Hekimliği Anabilimdalı/Giresun
- 2 Giresun Üniversitesi Gastroenteroloji Anabililimdalı/Giresun
- 3 Giresun Üniversitesi Gastroenteroloji Kliniği /Giresun

**AİM**: Chronic HBV infection (CHB) is a world-wide prevalent disease, but the seroprevalence of hepatitis B virus surface antigen (HBs Ag) in very elderly subjects is lacking due to the uncertainty of the exact time of infection and limited epidemiologic data. Here we analyzed detailed seroprevalance of HBs Ag in very elderly subjects in a local community who resident in coastal region of south-east Blacksea.

**METHODS:** A retrospective single-center review of very elderly subjects seen at Giresun University Hospital, Turkey, between January 2018 and June 2018 was performed. Totally, 1301 subjects older than 85 years were admitted. The mean age was 87,85  $\pm$ 2.77 years; 854 (65%) of them were female. Control group (440 subjects; mean age 46  $\pm$ 2.3 years; 220 of them were female) was selected from healthy middle aged subjects. Demographic and laboratory data were extracted from the database.

**RESULTS:** At total, 10 elderly subjects (0.7%) tested positive for HBs Ag. Among middle-aged control subjects; 11 (2.7%) had seropositive results for HBs Ag. There was significant difference between groups in terms of HBs Ag seroprevalence (p<0.005).

**CONCLUSION:** In this local community, higher survival rates in elderly subjects may have been linked to low prevalence of HBV infection. Sample size limited the power of these analyses, but the findings suggest that Turkish coastal region of Blacksea should be considered as low endemic area for HBV infection compared to other parts of Turkey.

#### POSTER 6

#### USING SUGAMMADEX IN ANGIOGRAPHY ROOM WITH CARDIAC PATIENTS

Ayca Sultan Sahin,MD<sup>1</sup>; Ece Salihoğlu,MD<sup>2</sup> 1 Kanuni Sultan Suleyman Education and Training Hospital, Istanbul, Turkey 2 Bilim Üniversity, Istanbul, Turkey

#### Introduction:

After general anaesthesia, adverse cardiovascular effects such as impaired heart rate control may also occur with the use of anticholinesterase—anticholinergic drug combinations, such as neostigmine—atropine, used for the reversal of neuromuscular blockade. This combination has been suggested that they should be used with caution in patients with underlying cardiovascular disease. Sugammadex is also unlikely to cause any major adverse effects, including adverse cardiovascular effects.

#### Method:

In this study, ASA classI-III,  $\geq 18$  years old, 20 patients, scheduled for Endovascular Repair of Abdominal Aortic Aneurysm (EVAR) and Thoracic endovascular aortic repair (TEVAR) under general anaesthesia, in angiography room, were included in the study. After induction of anaesthesia but before administration of rocuronium, monitoring of neuromuscular function was started using the TOFWatch1 SX. TOF stimulation was applied every 15 s at the ulnar nerve until the end of anaesthesia or at least until recovery of the TOF ratio to at least 0.9. End of the anaesthesia we used 2 mg/kg sugammadex in the sugammadex group(n:10) and used neostigmin/atropin combination in the neostigmin group(n:10).

#### Results:

Time from start of administration of the study drug to recovery of the T4/T1 ratio to 0.9 was considerably faster with sugammadex 2 mg/kg compared with neostigmin/atropine. Duration of stay in the recovery and angiography room was shorter in sugammadex group. There were no complications in both groups.

#### Conclusion:

We have shown that in patients who had cardiac diseases, sugammadex 2.0 mg/kg could be administered safely and effectively for thereversal of rocuronium-induced neuromuscular blockade.

#### POSTER 7

#### N-HEKZAN RESPONSIBLE POLYNEUROPATHY: A CASE REPORT

Köksal Sarıhan<sup>1</sup>, Halil İbrahim Bekdemir<sup>1</sup>, Akın Erdal<sup>1</sup>, Yasemin Çayır<sup>2</sup>
1.Atatürk University Faculty of Medicine Physical Medicine and Rehabilitation Department
2.Atatürk University Faculty of Medicine Family Medicine Department

#### **INTRODUCTION:**

*N-hexane-containing adhesives can cause sensory-motor axonal polyneuropathy because of chronic exposure by the skin or by inhalation. In this article we present a patient with symmetric sensorimotor polyneuropathy due to n-hexane exposure.* 

#### CASE REPORT:

A 13-year-old female patient was admitted to our pediatric department with complaints of weakness in hands and feet that were present for 2-3 months. The treatment of the patient was made by hospitalization. At first examination lower and upper limb muscle strength decreased and sensory examination was normal. In anamnesis it was learned that she was working in shoe manifacturing. The patient underwent EMG with pre-diagnosis of polyneuropathy due to n-hexane. As a result of EMG, sensorimotor polyneuropathy was detected in the patient. The patient was diagnosed with sensorimotor polyneuropathy due to N-hexane as a result of blood tests and EMG.

Physical therapy and rehabilitation departmental consultation for patient rehabilitation was consulted. Upper and lower extremity muscle strengths were determined as 4/5 at the first examination of our patient. There was no sensory deficit. Progressively resistant exercises, balance-coordination exercises for all muscle groups of the patient's lower and upper extremity were started. The patient who did not have any additional problems during treatment received

exercise therapy 2 X 20 times for 20 days. She was discharged after being suggested to continue with the exercises.

#### **DISCUSSION-CONCLUSION:**

N-Hexane is a hydrocarbon derivative widely used in different industries such as textile, furniture and shoe making because it is a cheap solvent. Inhalation abuse of solvents or adhesives outside of industrial use also causes intoxications. The most common clinical picture associated with industrial use is polyneuropathy, in which sensory-onset motor findings are added. In chronic use, the critical limit for n-hexane concentration in respiratory air in the development of neuropathy is assumed to be 60-200 ppm.

The first treatment to be done is to discontinue n-hexane exposure. Long-term follow-up after the exposure has been avoided gives usually good results.

Even if asymptomatic, polyneuropathy may be detected in EMG in 60% of cases. Therefore, it is necessary to correct the conditions of ventilation in the n-hexane-using workplaces and to follow closely the persons exposed. In addition, electrophysiological examinations, including those with short-term exposure, are required. In this respect, family physicians providing first level health services also have serious responsibilities.

#### REFERENCES:

1. Cantürk İA, Işık N, Candan F at al. The clinical and electrophysiological characteristics of N-hexane neuropathy in shoe makers. Göztepe Tıp Dergisi 25(3):116-120, 2010.

2. Pastore C, Izura V, Marhuenda D. Partial conduction blocks in n-hexane neuropathy. Muscle and Nerve 2002; 26(1):132-5.

#### .POSTER 8

# EXAMINATION OF UNCONTROLLED HYPERTENSION CASES REFERRED TO RIZE FAMILY HEALTH CARE CENTER

Handan Duman<sup>1</sup>, Hakan Duman<sup>2</sup>

<sup>1</sup> Ministry Of Health, Family Health Center, Rize

Objective: Hypertension is often poorly controlled and the risk of cardiovascular morbidity and mortality may be higher in hypertensive patients with uncontrolled hypertension. Worldwide, the epidemiological and economic burdens of hypertension have been growing steadily. Treatment incompatibility of patients, and lack of knowledge about hypertension increase these difficulties. Uncontrolled hypertension has become a serious problem in developing countries. We also wanted to investigate the uncontrolled hypertension in Rize family health center no 1.

Methods: 107 uncontrolled hypertension cases were included in the study. Hypertension was accepted as a systolic 140 diastolic 90 mmHg above the European Society Of Cardiology guidelines. Uncontrolled hypertension defined as resistant hypertension, incompatible hypertension patients or patients receiving inadequate treatment.

**Results:** The study population included 107 patients with uncontrolled hypertension. Inadequate treatment of patients was 36%, treatment incompatibility was 48%, resistant hypertension was 16%. There was no statistically significant difference between baseline laboratory values among

<sup>&</sup>lt;sup>2</sup>Department of Cardiology, Faculty of Medicine, Recep Tayyip Erdoğan University, Rize, Turkey.

the three patient groups. The average age of the patients was  $55\pm8$  years. The number of female (n=60, 56%) was higher than male (n=47, 44%) in patient. The median body mass index of the patients was 28 kg/m2 (18-40 kg/m2). mean systolic and diastolic blood pressures were  $158\pm14$  and  $96\pm4$  mm/Hg. The rates of receiving ACE inhibitor, beta blocker, calcium channel blocker and diuretic were 43%, 19%, 27%, 52% respectively.

Conclusions: Although the access to the health care system in our country is very good, the frequency of uncontrolled hypertension is quite high. Uncontrolled hypertension is a heterogeneous group of patients who do not regularly diet, generally not compliant with treatment. We found that among the major factors of uncontrolled hypertension in our region are treatment incompatibility and not reaching the target drug dose.

#### POSTER 9

COEXISTENCE OF FAMILIAL MEDITERRANEAN FEVER AND RHEUMATOID ARTHRITIS: CASE REPORT

Köksal Sarıhan<sup>1</sup>, Halil İbrahim Bekdemir<sup>1</sup>, Ayhan Kul<sup>1</sup>, Yasemin Çayır<sup>2</sup>
1.Atatürk University Faculty of Medicine Physical Medicine and Rehabilitation Department
2.Atatürk University Faculty of Medicine Family Medicine Department

#### **INTRODUCTION:**

Familial Mediterranean Fever (FMF) is a autoinflammatory disease characterized by attacks of fever, polyserositis, arthritis. Rheumatoid arthritis (RA) is a progressive disease with symmetrical joint involvement. The coexistence of these two rheumatic diseases is rare. We wanted to report the patient we followed up with RA and FMF diagnoses in order to draw attention to this rare association seen in this article.

#### CASE REPORT:

A 41-year-old male patient with irregular medication, applied to our rheumatology polyclinic. It was learned that the patient had been followed up for RA for 10 years, using Golimumab 50 mg 1x1 s.c once a month. He had knees and hip prosthesis operations (Picture 1). The first physical examination revealed an antalgic gait and malformations in the hands. There was no active arthritis. There was no significant finding in other system examinations.

When the patient's story was elaborated, it was learned that he had also received FMF diagnosis. Previous FMF gene analysis revealed that M694V was heterozygous positive. Our patient had FMF story in the family. There was also a complaint of painful abdominal pain every 6 months. In the presence of current findings, our patient's FMF diagnosis was confirmed.

Hand x-ray revealed RA-linked hand joint involvement. Previously, the desired rheumatoid factor and anti-citrulline peptide antibody were found to be highly positive. Although there was no arthritic finding on physical examination, there was a symmetrical polyarthritis story. Thus the RA diagnosis was confirmed.

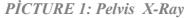
The patient's routine laboratory tests were normal. Physical examination and blood tests were considered to have stabilized both diseases. The patient is still being monitored with the treatment of Colchicine 0.5 mg the 2x 1 daily and Golimumah 50 mg s.c 1x1 monthly.

#### **DISCUSSION-CONCLUSION:**

FMF is a disease in which recurrent abdominal, chest pain, fever attacks, sometimes accompanied by arthritis attacks. While the joint involvement of FMF is generally better-natured and the lower limb involvement is more common. Joint involvement in RA is progressive, symmetrical polyarticular and more commonly in the hands.

In FMF there is a mutation in the MEFV gene. The most common mutations seen on this gene are M694V, E148Q, V726A and M680I. MEFV gene mutation has been found to be associated with diseases other than FMF such as RA, systemic lupus erythematosus (SLE), ankylosing spondylitis. In patients with RA, MEFV mutation affects the disease course negatively. In our patient M694V mutation was detected.

In conclusion, it should be kept in mind that patients with FMF with the MEFV mutation may also have other rheumatic diseases, and these usually have poor prognosis. For this reason, each arthritis should not be considered joint involvement of FMF and should be considered differential in inflammatory rheumatic diseases such as RA.





#### POSTER 10

#### ERYTHEMA ANNULARE CENTRIFUGUM ACCOMPANYING TO TINEA INFECTION

İbrahim Halil Yavuz Yüzüncü Yıl University Faculty of Medicine Department of Dermatology

#### INTRODUCTION

Erythema annulare centrifugum (EAC) is a rare cutaneous disease characterized by erythematous, scaling and annular plaques that usually involved the thighs and the legs. EAC is self-limited disease with variable course that lasts as little as few weeks to as long as three decades. The exact cause of EAC is not known. However, various agents have been implicated including hypersensitivity reaction to drugs, arthropod bites, infections, food allergy, malignancy as (lymphoma, multiple myeloma, breast cancer), autoimmune and endocrine disease. We report here a case of erythema annulare centrifugum accompanying to tinea infection.

#### CASE REPORT

A 56 year old female patient present with generalized redness in the body. Other system examinations were normal. Dermatologic examination revealed that there were plaques, the largest 12 cm in diameter, multiple, annuler, erytematous scaly. Hyperkeratosis in both soles, and yellow color change in nails, subungual hyperkeratosis was detected. No fungus elements were found in the potassium hydroxide examination of the lesion. However, the tinea were seen in the examination of the food, after systemic fungal treatment on the feet and topical stresoids on the patient's body lesions, improvement was detected in the lesions.

#### **DISCUSSION**

EAC is uncommon inflammatory condition characterized by annular or arcuate erythematous eruptions that slowly enlarge centrifugally. It is believed that EAC represents a cutaneous manifestation of a type IV hypersensitivity reaction to different causes and underlying systemic diseases. EAC resolves either spontaneously or once the underlying disease has been successfully treated. Topical medications like corticosteroids, tacrolimus, calcipotriene, oral metronidazole, subcutaneous etanercept and subcutaneous interferon- $\alpha$  have been all used with some benefit.

#### CONCLUSION

EAC is generally considered an idiopathic disease because no causative agent can be detected. I wanted to present the case of EAC which is frequently mixed with psoriasis and fungal disease



#### POSTER 11

## DIFFERENT SITUATION FOR CLINICANS; TİNEA İNCOGNİTO

Göknur Özaydın Yavuz<sup>1</sup>, İbrahim Halil Yavuz<sup>1</sup> 1 Yüzüncü Yıl University Faculty of Medicine Department of Dermatology

INTRODUCTION: Tinea incognito (TI) is a term used to describe a tinea infection modified by topical steroids. It is caused by prolonged use of topical steroids, sometimes prescribed as a result of incorrect diagnosis. Topical steroids suppress the local immune response and allow the fungus to grow easily. As a result, the fungal infection may take on the bizarre appearance seen in this patient.

CASE: A 53-year-old male patient was admitted to our clinic due to redness and crusting of the feet. There was an increase in complaints after cream treatment given for foot 1 month ago. The dermatological examination revealed that there were scaly plaques in both feet. Fungal hyphae were detected in the KOH examination. Significant improvement was observed after treatment with topical and systemic antifungal therapy.

**DISCUSSION:.** The clinical features of TI were reported to be variable, and the most prevalent features seen are eczema-like disorders such as nonspecific eczema, contact dermatitis, and atopic dermatitis. Therefore, when dealing with recalcitrant eczematous lesions on the hand or foot, mycological examination should always be considered.

**CONCLUSION:** We recommend not to neglect TI as a possibility in cases of recalcitrant variable skin lesions, not hesitating to do active mycological examinations, which would give them some critical clues in diagnosis of TI, and doing careful clinical examinations when finding combined tinea pedis or tinea unguium.



#### POSTER 12

A CASE THAT REPRODUCTION OF MENINGITIS AS A RESULT OF STREPTOCOCCUS PNEUMONIAE

İlkay Bahçeci<sup>1</sup>, Cüneyt Ardıç<sup>2</sup>, İlknur Esen Yıldız<sup>3</sup>

<sup>1</sup>Recep Tayyip Erdoğan University, F,aculty of Medicine, Departman of Medical Microbiology/RİZE

<sup>2</sup>Recep Tayyip Erdoğan University, F,aculty of Medicine, Departman of Family Medicine / RİZE

<sup>3</sup>Recep Tayyip Erdoğan University, F,aculty of Medicine, Departman of Infection Diseases /RİZE

ENTRANCE: Meningitis is the inflammation of the meningeal membranes surrounding the brain and spinalcord. Although it often occurs with bacteria, many microorganisms such as

viruses and fungi can cause meningitis. 80-85% of bacterial meningitis is responsible for Neisisseria meningitidis, Streptococcus pneumoniae and Haemophilus influenzae. Streptococcus pneumoniae is the most common cause of bacterial meningitis. The sepatients usually have pneumococca linfection in an other focus (e.g.,pneumonia, otitismedia, mastoiditis, sinusitis o rendocarditis). However, recurrent bacterial meningitis is important because of the fact that it causes many invasive interventions as well as life-threatening characteristics, increases in the number of hospitalizations and forms the basis for psychological trauma. Bacterial migration often occurs in the form of a transition from the skin or spinal dural defectto the central nervous system. Inaddition, recurrent meningitis may develop as a result of upper respiratory tract infectionorin sufficient treatment of these. Inthiscase, we aimed to present a case of meningitis in an adult patient who developed a second time after sinusitis infection and to draw attention to the subject.

EVENT: A 50-year-old female patient was admitted to the emergency department with complaints of nasal discharge, headache and mild cough. Mean while, blurring of consciousness begins. His past medical historyr eveals that he had meningitis associated with Streptococcus pneumonia five years earlier. Hemogram, routine biochemistry, CSF (Cerebro spinal Fluid) Gram staining, cell counting, CSF culture, ARB (Asido Resistance Basil) staining, Tuberculosis Culture, CSF biochemistry, Cranial imaging is required. Cranial imaging was consistent with ethmoidal and sphenoidal sinusitis. As a result of the hemogram, white blood cell (14.000 / U) was increased, CSF biochemistry increased protein in line with bacterial meningitis, glucose decreased, Gram positive diplococcus in CSF Gram stainingand 2300 leukocytes counted in cell count (in favor of 60% polymorph core leukocytes). These results were diagnosed as acute bacterial meningitis and I.V. Ceftriaxone treatment was started. Streptococcus pneumoniae growth was found in the second day of CSF culture and penicilin was found to be sensitive to antimicrobial susceptibility. There was no bacilli in ARB staining. On the third day of the treatment, the consciousness was completely opened and the patient was discharged on the fourteenth day after she was healed and to ldtocome to the control.

RESULT: Pneumococcal disease is an important group of infections with increasing incidence and mortality. Middle ear infection, sinusitis, purulent bronchitis, bacterial meningitis and sepsis are the most important pneumococcal diseases especially in patients with advanced age and immunocom promised patients. Meningitis has an important role in pneumococcal diseases. Pneumococci are the leading causes of bacterial meningitis. Mortality of pneumococcal meningitis varies between 15% and 30% despite new diagnostic methods and appropriate treatment, and is usually due to an underlying cause in patients. Mortality increases in advanced age and immunosuppression. Considering that the history of meningitis may occur in patients with a history of meningitis, follow-up and treatment should be planned well and empirical treatment should be started accordingly. Anamnesis and clinical examination should be performed very carefully in these patients, who mostly refer to the first step. In addition, the vaccination of individuals who are at risk of pneumococcal infection, as in the case presented here, may be protective against severe infections such as meningitis which may develop later.

KeyWords: Streptococcus pneumoniae, menengitis, sinusitis

#### POSTER 13

#### A CASE OF SEPSIS DUE TO LISTERIA MONOCYTOGENES

İlkay Bahçeci<sup>1</sup>, İlknur Esen Yıldız<sup>2</sup>

<sup>1</sup>Recep Tayyip Erdoğan University, Faculty of Medicine, Departman of Medical Microbiology/RİZE

<sup>2</sup>Recep Tayyip Erdoğan University, Faculty of Medicine, Departman of Infection Diseases /RİZE

ENTRANCE: Listeria monocytogenes is a short, unbranched gram-positive rod that is facultative anaerobes, non-spores, catalase-positive, oxidase-negative, esculin hydrolyzed. It forms in the blood agar and forms a narrow  $\beta$  hemolysis zone. L.monocytogenes is a major zoonotic infectious disease. Soil, rotten vegetables, juice, prepared food and animal feed can be transmitted by the fecal-oral route. The general population is also rare. However, people who are immuno compromised, newborns, elderly people or pregnancies are confronted as an important pathogen. The most common clinical presentation is diarrhea, which can lead to bacteremia, meningitis, brain abscess, endocarditis, osteomyelitis or pneumonia. Thus, Listeria monocytogenes is an important disease agent not only for inpatients but also for standing patients. Especially in the health services carried out by the family physicians at home, it will provide great convenience to the patients and institutions by evaluating the case from every aspect and directing it to the necessaryunits. In this case, it is aimed to present the case of sepsis, which develops in a cancer patient who is followed by receiving health service at home.

**EVENT:** A 56-year-old male patient; fever, general body pain complaints due to the emergency polyclinic. The patient's history shows that she has been suffering from Diabetes Mellitus for 10 years and has received her treatment. He has also been diagnosed with Hepato Cellular Cancer (HCC) for 3 years and is there for ereceiving chemotherapy. The patient's follow-up is done by the family physician at home. Emergency service before th eapplication refers to the body pain in between. The patient who has been evaluate dandurged to the emergency department is referred to the Oncology department for liver function tests, BCC ultrasonography and liver magnetic resonance imaging in terms of HCC. Their results are also prompted by a set of blood culture requests. The blood cultures of the patient are signaling on the fourthday. Upon signa lreception from two blood cultures (BacTAlert 3D, France); implement a passage which made on 5% sheep blood medium (RTA Media, Turkey) and it seen that semi-transparent small colonies which doing beta hemolysis. Catalase and indole positive, oxidase negative, and esculin hydrolyzed bacterin were observed to be mobile at room temperature and less at 37 ° C in Gram positive rod morphology. Bacteria were identified as L. monocytogenes with Vitek-2 compact system (BioMérieux, France). Antibiotic susceptibility was investigated by disk diffusion method according to EUCAST standards. The patient whose ampicillin and gentamicin treatment was initiated was discharged after 14 days to follow-up.

**RESULT:** L.monocytogenes is a Gram positive bacterium that is commonly found in nature and can cause disease both in animals and in humans, often causing infection in patients who are pregnant and have immunodeficiency. While it has been shown experimentally that  $10~\mu$  microorganisms should be taken for the formation of infections in healthy mammals, L.

monocytogenes infection in patients with cancer or immunosuppressed patients and other risky groups may cause lowinoculum. As a result, L. monocytogenes should be kept in mind when seeking the focus and effect of infection in patients with malignancy or immunosuppression and empirical treatment should be regulated accordingly.

**Keywords:** Listeria monocytogenes, cancer, sepsis.

#### POSTER 14

## İKİNCİ VE ÜÇÜNCÜ BASAMAK SAĞLIK HİZMETİ VEREN KURULUŞLARDA HEKİMLERİN OBEZİTE ÖNYARGISININ BELİRLENMESİ

Ezgi DEVECİ<sup>1</sup>, Mustafa ERCEYES<sup>1</sup>, Şefik METİN<sup>1</sup>, Mehmet Akif YORGANCI<sup>1</sup>, Hüseyin EREN<sup>2</sup>

Amaç:Obezite Dünya Sağlık Örgütü (DSÖ)'ne göre sağlığı bozacak ölçüde vücutta anormal veya aşırı yağ birikmesi olarak tanımlamaktadır.DSÖ 2016'da dünya nüfusunun 18 yaş ve üstünün %39'unu pre-obez,%13'ünüde obez olduğunu bildirirken,Sağlık Bakanlığımız'da aynı yıl bu oranı 15 yaş ve üzeri için %34,3 ve %19,6 olarak bildirmiştir. Obez insanlar toplumda önyargıya maruz kalmakta eğitim ve iş sektöründe,özellikle de sağlık alanında olumsuz davranışlarla karşılaşmaktadırlar.Bu durum obez bireylerin sağlık hizmetinden kaçınmalarına,tedavilerini aksatmalarına ve sonuç olarak artan sağlık problemlerine neden olmaktadır.Biz de bu bilgiler çerçevesinde 2. ve 3. basamak hastanelerde görev yapan hekimlerin obez hastalara karşı dış görünüş,ruhsal durum,sağlık gibi kategorilerinde önyargıları değerlendirmeyi amaçladık.

**Yöntem:** Rize ilinde 2. ve 3. Basamak altı merkezde prospektif olarak Ocak 2018 – Mart 2018 tarihleri arasında düzenlenen anket çalışmasına 45(%44.1) kadın,57(%55.9) erkek olmak üzere toplam 102 hekim katıldı. Anket içeriğinde demografik özellikleri(yaş, cinsiyet, medeni durum, gelir durumu, meslekte çalışma süresi, boy, kilo, vücut yapıları), obez bireylere karşı tutumu, ailede obez kişileri kapsayan sorular ve 27 soruluk obezite ön yargı anketi bulunmaktaydı. Veriler Recep Tayyip Erdoğan Üniversitesi(RTEÜ) Tıp Fakültesi Girişimsel Olmayan Klinik Araştırmalar Etik Kurulu'ndan gerekli izinler alındıktan sonra, 6 merkezden hekimler arasından anket ile toplandı.

**Bulgular:** Araştırmaya katılan 102 katılımcının yaşları ortalaması 33,86(S.S=6,987)idi. %44,1(45) kadın ve %55,9 (57) erkek,%66,7'si(68) evli ve %33,3 'ü (34) bekardı. %66'sının geliri giderinden fazla,%28'nin geliri giderini eşit ve%8'nin geliri giderinden azdı. Meslekte ortalama çalışma süresi 9,11(ss=6.826) yıldı.Boy ortalaması 170.60 cm(SS=8.654) ve kilo ortalaması 75.53 kg(16.509) idi.Cinsiyete göre vücut yapıları arasında istatistiksel olarak anlamlı bir fark yoktu.Ki-Kare=9.308(sd=5).Katılımcıların %73,5'inin obeziteye karşı önyargısız olduklarını belirlendi.Ailelerinde %66 birey obez değilken,%19 oranda anne,%10 oranda baba ve %7 oranda diğer bireyler obez olarak tesbit edildi(Tablo1)

Anket analizinde hekimlerin 10 soruda negatif,3 soruda pozitif cevap verdiği ve 14 soruda kararsız kaldığı gözlendi.

**Sonuç:**Obezite önlenebilir ölümlerin sigaradan sonra ikinci en önemli nedeni olup, ciddi bir halk sağlığı sorunudur.Obezitenin önlenmesi için toplumun tüm katmanlarını

<sup>&</sup>lt;sup>1</sup>Recep Tayyip Erdoğan Üniversitesi Tıp Fakültesi, Rize, Türkiye

<sup>&</sup>lt;sup>2</sup>Recep Tayyip Erdoğan Üniversitesi Tıp Fakültesi Üroloji Ana Bilim Dalı, Rize, Türkiye

kapsayacak,uygulanması kolay ve ucuz yeni müdahale programları geliştirilmekte ve uygulamalar ortaya konulmaktadır.Bu süreçte bireylerle etkileşimden ötürü en önemli roller hekimlere düşmektedir.Çalışmamızda ilk kısmda obez bireylere karşı tutum sorusuna yüksek oranda(%73,5) önyargısızım cevabı çıkmış,sonrasındaki 27 soruluk önyargı anketinde bu oranın önyargılıyıma doğru değiştiği gözlenmiş ve hekimlerin önyargılı olduğu ortaya konulmuştur.Bu ön yargılı yaklaşım tedavilerin gecikmesine obez hastaların yaşam kalitesinde düşüşe neden olmaktadır.Bu nedenle ön yargının belirlenmesi konusundaki çalışmalar sağlık sektöründe daha geniş kapsamlı olmalı ve yaygınlaştırılmalıdır.

Tablo 1 Obezite anket verileri

| Maddel | er  | Kesinl<br>Katılm |    |      | lmıyo | Kara | arsızım | Katı<br>m | lılıyor |      | inlikle<br>lıyorun |
|--------|---|------------------|----|------|-------|------|---------|-----------|---------|------|--------------------|
|        |   | %                | f  | %    | f     | %    | f       | %         | f       | %    | f                  |
| 1.     | Bencildirler  | 32.4             | 33 | 43.1 | 44    | 18.6 | 19      | 2.9       | 3       | 2.9  | 3                  |
| 2.     | Güzel yüzlüdürler   | 2.9              | 3  | 23,5 | 24    | 30.4 | 31      | 34.3      | 35      | 8.8  | 9                  |
| 3.     | Estetik değildirler   | 5.9              | 6  | 14.7 | 15    | 15.7 | 16      | 54.9      | 56      | 8,8  | 9                  |
| 4.     | Güler yüzlüdürler   | 2.9              | 3  | 7.8  | 8     | 37.3 | 38      | 43.1      | 44      | 8.8  | 9                  |
| 5.     | İradesizdirler  | 5.9              | 6  | 16.7 | 17    | 25.5 | 26      | 37.3      | 38      | 14.7 | 15                 |
| 6.     | Hastalıklara yatkındırlar                                     | 2.9              | 3  | 3.9  | 4     | 5.9  | 6       | 40.2      | 41      | 47.1 | 48                 |
| 7.     | Mutludurlar   | 7.8              | 8  | 24.5 | 25    | 45.1 | 46      | 20.6      | 21      | 2    | 2                  |
| 8.     | Toplumda yemek yemekten<br>hoşlanmazlar                       | 14.7             | 15 | 46.1 | 47    | 24.5 | 25      | 10.8      | 11      | 3.9  | 4                  |
| 9.     | Korkaktırlar  | 15.7             | 16 | 41.2 | 42    | 34.3 | 35      | 6.9       | 7       | 2    | 2                  |
| 10.    | Misafirperverdirler   | 2                | 2  | 5.9  | 6     | 49   | 50      | 34.3      | 35      | 8.8  | 9                  |
| 11.    | Çekicidirler  | 19.6             | 20 | 30.4 | 31    | 43.1 | 44      | 4.9       | 5       | 2    | 2                  |
| 12.    | Hareket yetenekleri kısıtlıdır                                | 3.9              | 4  | 6.9  | 7     | 9.8  | 10      | 52        | 53      | 27.5 | 28                 |
| 13.    | Ter kokarlar  | 8.8              | 9  | 24.5 | 25    | 39.2 | 40      | 24.5      | 25      | 2.9  | 3                  |
| 14.    | Sempatiktirler  | 4.9              | 5  | 12.7 | 13    | 26.5 | 27      | 49        | 50      | 6.9  | 7                  |
| 15.    | Sağlıklı görünürler   | 25.5             | 26 | 52   | 53    | 13.7 | 14      | 6.9       | 7       | 2    | 2                  |
| 16.    | Hareket etmeyi sevmezler                                      | 4.9              | 5  | 13.7 | 14    | 23.5 | 24      | 46.1      | 47      | 11.8 | 12                 |
| 17.    | Özgüvenlidirler   | 6.9              | 7  | 28.4 | 29    | 54.9 | 56      | 7.8       | 8       | 2    | 2                  |
| 18.    | Yaşam kaliteleri düşüktür                                     | 3.9              | 4  | 17.6 | 18    | 16.7 | 17      | 45.1      | 46      | 16.7 | 17                 |
| 19.    | Olduğundan daha yaşlı görünürler                              | 1                | 1  | 15.7 | 16    | 21.6 | 22      | 45.1      | 46      | 16.7 | 17                 |
| 20.    | Sosyal ilişkileri güçlüdür                                    | 4.9              | 5  | 12.7 | 13    | 61.8 | 63      | 19.6      | 20      | 1    | 1                  |
| 21.    | Çabuk yorulurlar  | 1                | 1  | 5.9  | 6     | 10.8 | 11      | 58.8      | 60      | 23.5 | 24                 |
| 22.    | İyi dinleyicidirler   | 3.9              | 4  | 14.7 | 15    | 61.8 | 63      | 16.7      | 17      | 2.9  | 3                  |
| 23.    | Hareketlerinde yavaştırlar                                    | 2                | 2  | 6.9  | 7     | 11.8 | 12      | 64.7      | 66      | 14.7 | 15                 |
| 24.    | Tembeldirler  | 5.9              | 6  | 23.5 | 24    | 37.3 | 38      | 25.5      | 26      | 7.8  | 8                  |
| 25.    | Güzel yemek yaparlar  | 2.9              | 3  | 8.8  | 9     | 61.8 | 63      | 22.5      | 23      | 3.9  | 4                  |
| 26.    | Görünümlerinden dolayı duygusal ilişkilerde tercih edilmezler | 4.9              | 5  | 29.4 | 30    | 31.4 | 32      | 30.4      | 31      | 3.9  | 4                  |
| 27.    | Cana yakındırlar  | 2                | 2  | 5.9  | 6     | 36.3 | 37      | 49        | 50      | 6.9  | 7                  |

#### POSTER 15

#### METABOLIC SYNDROME MANAGEMENT: A CASE REPORT

Cuma Ali ZOBA, Abdullah Kaan KURT, Turan SET, Elif ATEŞ

Karadeniz Technical University, Faculty of Medicine, Department of Family Medicine, Trabzon, TURKEY

Introduction: Metabolic syndrome (MetS) is a condition where multiple risk factors coexist, increase the risk of developing diabetes and cardiovascular disease. MetS is becoming an increasingly important health problem because of the increased risk of diabetes and cardiovascular disease. The aim of this study was to discuss the management of metabolic syndrome in primary care setting via a patient admitted to the family medicine outpatient clinic.

Case report: 55 years old female patient was admitted to our family medicine outpatient clinic for weight counseling. The patient had an overweight problem for 20 years. The patient stated that he had attempted to lose weight 5 times to this day but he was not successful. There was no significant feature in her medical history, except the diagnosis of diabetes and the initiation of metformin therapy 2 years ago. The patient stated that he was spontaneously quitting the drug without the control of the doctor. Her patient mother and sisters were as well almost the same height and weight, he said. The patient's general condition was good and systemic examinations were normal. Vital signs of the patient; axillary fever: 36,6 °C, respiratory rate: 20/min, pulse: 90/min and blood pressure:130/80 mmHg. The patient's body weight was 110 kg, length was 150 cm, waist circumference was 120 cm, body mass index was 48,8 kg/m2. The results of the laboratory examination are shown in Table 1. MetS was diagnosed to the patient who had all the criteria for diagnosis. As start up program, 3 main meals and 2 snacks, 1700 kcal diet from the cholesterol and salt limited was prepared. The patient was recommended to walk at a moderate tempo for 30-40 min/day 5 days a week. To patient regular blood pressure and weight measurement were recommended. To patient daily 2x1000 mg metformin therapy was started. Salt consumption and dietary compliance were evaluated with regularly monthly follow up. Periodically from patient the amounts of nutrients consumed on a daily basis were requested as a list. The diet program was updated by making calorie calculation on the list. İn control six months after the diagnosis, the patient's body weight was 78 kg, waist circumference was 94 cm and body mass index was 34.6 kg/m<sup>2</sup>. Her blood pressure was 125/75 mmHg. Laboratory results are shown in Table 1. The follow ups of the patient continues.

| Table 1. Physical examination findings and laboratory results |          |               |  |  |  |
|---|----------|---------------|--|--|--|
|   | Baseline | 6 month later |  |  |  |
| Body weight (kg)  | 110      | 78            |  |  |  |
| Waist circumference (cm)                                      | 120      | 94            |  |  |  |
| Body mass index (kg/m2)                                       | 48,8     | 34,6          |  |  |  |
| Blood pressure (mmHg)   | 130/80   | 125/75        |  |  |  |
| Fasting plasma glucose (mg/dl)                                | 135      | 105           |  |  |  |
| Hba1c (%)   | 6.4      | 5.6           |  |  |  |
| Triglycerides (mg/dl)   | 170      | 155           |  |  |  |
| HDL-cholesterol (mg/dl)                                       | 46       | 46            |  |  |  |
| LDL-cholesterol (mg/dl)                                       | 125      | 63            |  |  |  |

Discussion and conclusion: MetS is widely seen in society. Since its onset is a silent disease, it requires special attention for diagnosis and treatment. In our case, the patient admitted to our clinic with obesity was evaluated comprehensively and to the patient was diagnosed as MetS. Patients with any of the MetS diagnostic criteria must be evaluated in terms of the MetS. Therefore family physicians have an important role in terms of providing comprehensive and holistic care.

# SÖZEL BİLDİRİLER

#### SÖZEL 1

## GENEL SAĞLIK TARAMASINDA ROMATOİD FAKTÖR ÖLÇÜMÜ

#### Abdulhalim Şenyiğit

Biruni Üniversitesi, Tıp Fakülttesi, İç hastalıkları Anabilim Dalı

Amaç: Romatoid faktör (RF) IgG molekülünün Fc kısmındaki antijenik bölgelere karşı oluşan otoantikorlardır. Romatoid artrit (RA) yeni tanı kriterleri arasında olup yüksek pozitifliği tanıyı güçlendirmektedir (1). RA tanısının erken konması mortalite ve morbitenin azaltılması açısından önemlidir. Sağlık taramalarında erken RA tanısı konması için rutin taramalarda RF'ün bakılmasının gerekliği tartışmalı bir konu olarak sürmektedir. Bu çalışmamızda genel sağlık taraması için gelen bireylerde RF pozitiflik oranlarını saptamak istedik.

**Yöntem:** Genel sağlık taramasına gelen bireylerde RF düzeyi bakıldı. Bireyler herhangi bir romotolojik yakınması yoktu. Bireylerde RF pozitifliği >30IU/ml olarak kabul edildi. Bireylerde 1. saat eritrosit sedimantasyon hızı (ESH) ve C-reaktif protein (CRP) düzeyine bakıldı. RF ile CRP ve ESH arasında korelasyon olup olmadığı değerlendirildi. Çalışmamızda ayrıca lojistik regresyon analizi yapılarak bağımlı değişken olarak RF (Negatif vs. Pozitif), bağımsız değişkenler olarak da ESH, CRP ve yaş değişkenleri alınmıştır.

**Bulgular:** Çalışmaya 2196 kişi katıldı. 2196 kişinin %61,4'ü (n=1348) erkek, %38,6'sı (n=848) kadındır. Çalışmaya katılan kişilerin yaş ortalaması 49,69+14,4 yıl olarak saptandı.

Bireylerin RF düzeyleri ortalaması 9,2+14,2 IU/ml bulundu. RF pozitifliği 169 (% 7.6) kişide saptandı. Çalışmaya katılan kişilerin ESH ortalaması 16,8+16,9 mm/ saat idi. CRP ortalaması 5,7+16,2 mg/l ölçüldü.

RF pozitif olan bireylerde negatif olan bireylere göre CRP değeri daha yüksek saptandı ( 16.8+40.3 mg/l vs 4.8+11.8 mg/l ; p<0.001). RF pozitif olanlarda yaş daha yüksek olarak bulundu (54.7+16.2 vs 49.4+14.3 vıl ; p<0.001).

Lojistik regresyon analizinde RF pozitif olanlarda daha yüksek ESH (OR 1,011, %95 Güven aralığı 1,002-1,021; p=0,021) ve CRP düzeyleri vardı (OR 1,016, %95 Güven aralığı 1,007-1,024; p<0,001). RF pozitif olanların yaşlarıda daha büyük saptandı (OR 1,015, %95 Güven aralığı 1,003-1,027; p=0,012).

RF ile ESH  $(r=0.151,\ p<0.001),\ CRP\ (r=0.132,\ p<0.001)$  ve yaş  $(r=0.121,\ p<0.001)$  arasında pozitif yönlü anlamlı korelasyon bulundu.

**Sonuç:** RF pozitif olanlarda CRP ve ESH yüksek olması yakınması olmayan bireyler subklinik inflamasyon olduğunu göstermekte, bu bireyler romatoid artrit gelişimi açısından yakın takip edilmelidir. Genel sağlık taramalarında akut faz göstergeleri ile birlikte RF bakılmalıdır. İleri yaşlarda RF pozitliği dikkatli yorumlanmalı yaşla birlikte arttığı unutulmamalıdır.

#### Kaynak:

1) Aletaha D, et al. 2010 Rheumatoid arthritis classification criteria: an American College of Rheumatology/European League Against Rheumatism collaborative initiative. Arthritis Rheum. 2010;62(9):2569-81.

#### SÖZEL 2

# PERCUTANEOUS ATRÌAL SEPTAL DEFECT CLOSURE AND USİNG TRANSTHORACİC ECHOCARDİOGRAPHY GUİDİNG

<u>Mustafa Yolcu</u>, Arel Universty, Private Medicana International Istanbul Hospital, Department of Cardiology, Istanbul, Turkey

**Mustafa Kemal Avşar,** Private Medicana International Istanbul Hospital, Department of Cardiovascular Surgery, Istanbul, Turkey

#### **Abstract**

Background: Atrial septal defect (ASD) is described as a congenital defect which allows an abormal blood flow between left and right atriums on any part of the interatrial septum. ASD is the most common congenital heart defect in adults population. In this study, we aimed to demonstrate the short-term results and reliability of the transthoracic echocardiography (TTE) and aimed to show that this method may be an alternative for transeosophageal echocardiography (TEE); because of its easy feasibility, less complication rate, less cost, less hospitalization duration and less invasiveness for transcatheter atrial septal defect closure.

Materials and methods: 63 patients (41 female, mean age  $34\pm11$  years) diagnosed with secundum ASD who's appropriate for percutaneous closure were included to the study. TTE was performed on all of the patients. 17 patients which were not decided if their ASD's were suitable for percutaneous closure, were evaluated with TEE before the prosedure. Percutaneous closure was performed on 14 patients out of total 17. 3 patients needed surgical correction.

**Results:** The mean defect size was found as  $20.3\pm4.2$  mm (max. 32 mm, min. 10 mm) and mean device size as  $24.3\pm5.2$  mm (max. 34 mm, min. 12 mm). In 8 patients, minimal residual leakage was detected with the TEE performed after the operation. 1 patient developed transient ischemic attack and was totally recovered after being treated with heparin.

Conclusions: ASD is the most common congenital heart defect in adults, diagnosing and proper treatment of ASD is essential in order to prevent patients from the possibility of developing pulmonary hypertension and Eisenmenger syndrome. Percutaneous closure treatment TTE may be used as a reliable, feasible and quickly method to evaluate the rims, sizes, other structures and device position. Percutanous closure with TTE may be reliably performed by experienced operators in ASD patients with high-quality echogenity, good septal anatomy and enough rims (except large, complex and multifenestrated ASDs).

**Key Words:** Atrial septal defect, percutaneous closure, transthoracic echocardiography

#### SÖZEL 3

FACTORS AFFECTING BOWEL CLEANSING BEFORE COLONOSCOPY: A PROSPECTIVE CLINICAL TRIAL

Aylin Hande Gökçe General Surgeon İstanbul Medicine Hospital General surgery clinic

**Purpose:** Colonoscopy is used to diagnose colorectal cancers in particular and to diagnose and treat inflammatory bowel diseases and colon polyps. In addition to the experience and

knowledge of endoscopists, an adequate bowel cleansing is of paramount importance. This study investigated potential associations between bowel cleansing and age, sex, education, and the presence of tumors or polyps.

Methods: This prospective study included patients who attended the endoscopy unit of our hospital and underwent an elective colonoscopy procedure for the first time. Patients who underwent a rectosigmoidoscopy were excluded from the study. Bowel cleansing was explained to each patient by the same person and Sennoside A+B calcium and 2 enemas were used for bowel cleansing. A 1-day diet was also recommended to patients for bowel cleansing purposes. In this diet, strictly forbidden food consisted of milk, dairy products and solid food. Patients were told that they could only consume pulp-free and grain-free food. A total of 462 patients were included in this study. Poor bowel cleansing criteria included the presence of solid stool in the colon, residual stool at the base of cecum and residual stool in amounts interfering with the performance of colonoscopy. Graduation from elementary school or less was considered low educational attainment and graduation from high school or higher educational institution was considered high educational attainment. A SPSS software was used for statistical analyses.

**Results**: Bowel cleansing was adequate in 326 out of 462 patients who underwent colonoscopy and these patients were included in the Group1 and patients who had inadequate bowel cleansing were included in the Group 2. The mean age in the Group 1 was  $53.02\pm15.14$  years and  $54.93 \pm 14.98$  years in the Group 2. No statistically significant difference was found between the two groups in the mean age (p=0.215). 237 study subjects were male and 225 were female. In the Group 1, 170 study subjects were male and 156 were female. In the Group 2, 67 study subjects were male and 69 were female. Sex distribution did not statistically significant differ between the group of patients who had adequate bowel cleansing and the group of patients who had inadequate bowel cleansing (p=0.572). Bowel cleansing was adequate in 230 out of 355 patients with low educational attainment and inadequate 115 out 355 patients with low educational attainment. 96 patients with high educational attainment had adequate bowel cleansing and 21 patients with high educational attainment had inadequate bowel cleansing. Educational attainment level was statistically significantly higher in the Group 1 than that in the *Group 2* (p=0.017). In our study sample, colon cancer was detected in 19 patients and colonic polyps were detected in 69 patients. Bowel cleansing was inadequate in 3 out of 19 patients with colon cancer and 18 out 69 patients with colonic polyps. No statistically significant difference was detected between the Group 1 and the Group 2 in the distribution of patients with tumors (p=0.183). We categorized the reasons for colonoscopy into five groups: anemia workup (Group A), frequent diarrhea (Group B), rectal bleeding (Group C), constipation (Group D), history of colon cancer in the family (Group E). No statistically significant differences were detected among these groups in the adequacy of bowel cleansing (p=0.144).

Conclusion: The adequacy of bowel cleansing did not statistically significantly differ between the groups categorized based on the age, sex, indications for colonoscopy and the presence of colon cancer or colonic polyps. Educational attainment level was statistically significantly higher in the group of patients who had adequate bowel cleansing than the group of patients who had not. We would like to emphasize that patients should be given more details about bowel cleansing, particular those with low educational attainment and illustrated forms should be prepared.

#### SÖZEL 4

#### İDİYOPATİK GRANÜLOMATÖZ MASTİTLERDE TEDAVİ YAKLAŞIMLARININ DEĞERLENDİRİLMESİ

<u>Atakan ÖZKAN</u>, Genel Cerrahi Uzmanı Özel İstanbul Medicine Hospital Hastanesi Genel Cerrahi Kliniği

**GİRİŞ**: Granülomatöz mastit (GM), etyolojisi çok iyi bilinmeyen, cerrahları tanı koymada zorlayan bir meme hastalığıdır.Bu çalışmanın amacı, Granülomatöz Mastitli hastaların klinik, patolojik ve radyolojik özelliklerini belirlemek ve bu hastaların tedavi sonuçlarını ve karşılaşılan zorlukları vurgulamaktır.

GEREÇ VE YÖNTEM: Haziran 2015 - Temmuz 2017 tarihleri arasında Özel Medicine Hospital Hastanesi genel cerrahi kliniğinde kalın iğne biyopsisiyle granülomatöz mastit tanısı almış 15 olgu çalışmaya alındı. Demografik özellikleri, hastaların klinik, patolojik ve radyolojik özellikleri irdelendi. Tüm olgulara medikal tedavi olarak antibioterapi yapıldı ve antibioterapiden fayda görmeyenlere ise 0.6mg/kg prednisolon tedavisi başlanıp 1 ay devam edildi. Prednisolon tedavisinden fayda görmeyen olgulara cerrahi uygulandı. Cerrahi tedavi olarak, negatif cerrahi sınır oluşturacak şekilde tüm inflamatuar dokular geniş olarak çıkarıldı. Tüm olguların cerrahi ve tıbbi tedavi sonuçları değerlendirildi.

BULGULAR: Hastaların yaşları 22-52 (ortalama yaş 35) arasında değişmekte idi. 10 olguda sağ meme, 5 olguda sol meme de tutulum mevcuttu. Vakaların %47'sinde görüntüleme bulguları malignite şüphesi içeriyordu. Kalın iğne biyopsisiyle malignite ekarte edildi. 10 olgu kullanılan antibiyoterapiye cevap vermiş olup regrese olmayan 5 olguya prednizolon tedavisi uygulandı. Hastaların onüçünde tedaviye tam cevap alındı. Prednizolon kullanımı sonrası regresyon sağlanan bir olgu 3 ay sonra nüks ile polikliniğe başvurdu. Tüm medikal tedavilere rağmen regrese olmayan 2 olgu ile birlikte nüks eden 1 olguya geniş cerrahi eksizyon yapıldı. Negatif cerrahi sınır oluşturacak şekilde tüm inflamatuar kitleler çıkarıldı. Bazı olgularda sinüs ve fistüller boyandı. Tüm olguların cerrahi sınırları negatif geldi ve patolojileri idiyopatik granülomatöz mastit ile uyumlu idi. Cerrahi uygulanan hastaların bir yıllık takibinde herhangi bir nüks saptanmadı.

SONUÇ: Granülomatöz Mastit ender görülen, tanı koymada hekimleri sıkıntıya sokan, kanser ayırıcı tanısının yapılmasını gerektiren bir hastalıktır. İdiyopatik granülomatöz mastitte tanı ancak diğer granülomatöz mastit nedenleri (tüberküloz, sarkoidoz, mantar enfeksiyonu gibi) dışlandıktan sonra konur. Bizim olgularımızın hemen hepsinde dahili bir patoloji saptanmadı, ancak iki olguda dış merkezde tüberküloz tedavisi uygulanmasına rağmen tedaviye cevap alınamama öyküsü mevcuttu . İdiyopatik granülomatöz mastitli hastaların çoğunda antibiyoterapi ve kortikosteroid tedavilerinin faydaları görülmektedir. Ancak bu medikal tedavilere yanıt vermeyen yada nüks eden olgularda geniş cerrahi eksizyonun bir tedavi seçeneği olduğu kanısındayız. Granülomatöz Mastit tedavisinde ideal bir tedavi protokolü oluşturulmasının gerekli olduğunu düşünmekteyiz.

#### SÖZEL 5

The efficacy of zinc oxide in the prophylaxis of pressure ulcers in immobile patients

<u>Feridun Suat Gökçe</u> General Surgeon İstanbul Balıklı Rum Hospital General surgery clinic

Purpose: Immobilization is one of the major factors contributing to the formation of pressure ulcers. Malnutrition, infections, incontinence, neurological deficits, sedation and friction are other factors that play a role in the development of this health condition. When a pressure ulcer occurs, infections may supervene soon and further complicate the treatment. After collecting specimens for culture, surgical debridement is required for the treatment of pressure ulcers. Then the treatment is continued with regular dressings. This can be a long and costly therapeutic process. Similarly, this process is difficult to handle for both patients and their caregivers. In this study, we investigated the efficacy of zinc oxide in the prophylaxis of pressure ulcers in bedridden patients.

Materials and Methods: 90 patients who had become bedridden due to a stroke or dementia and who had no pressure ulcers were included in this study. These patients were from a nursing home and their relatives gave their consent for the participation of the patients in this study. Patients with diabetes mellitus were excluded from the study. These patients continued to receive routine care with position changes 8 times daily and air mattresses were used in the nursing home. Nurses and allied health personnel were instructed how the change patient's position in practice. Position changes were performed by nurses or allied health personnel under the supervision of nurses. A blood chemistry analysis including glucose, albumin, urea, creatinine and CBC test were performed at the baseline and every month during the study and any deteriorations in these parameters were treated appropriately. A zinc oxide cream was applied to the heels, sacral region and pelvic area (i.e. areas where pressure ulcers are most likely to develop) once a day, in 45 out of 90 the study subjects. Patients underwent a physical examination at month 1, month 2 and month 3 to detect any potential pressure ulcers. Patients who developed pressure ulcers received appropriate treatment and were excluded from the study.

Results: Patients who received zinc oxide treatment were included in the group 1 and patients who did not receive zinc oxide treatment were included in the group 2. The Group 1 consisted of 22 male and 23 female patients and the Group 2 consisted of 26 male and 19 female patients. No statistically significant difference was found between the two groups in sex distribution (p=0.016). The mean age was  $83.8\pm9.57$ years in the Group 1 and  $78.55 \pm 10.65$  years in the group 2. In the group 1, heel pressure ulcers occurred in 2 patients in month 1, in 6 patients in month 2 and in 4 patients in month 3 while 33 patients in the group 1 did not develop heel pressure ulcers. In the Group 2, heel pressure ulcers occurred in 6 patients in month 1, in 8 patients in month 2 and in 7 patients in month 3 while 18 patients in the group 1 did not develop heel pressure ulcers. No statistically significant differences were found between the two groups in the incidence of heel pressure ulcers (p=0.21). In the Group 1, sacral pressure ulcers occurred in 3 patients in month 1, in 5 patients in month 2 and in 11 patients in month 3, while 26 patients in the group 1 did not develop sacral pressure ulcers. In the Group 2, sacral pressure ulcers occurred in 6 patients in month 1, in 12 patients in month 2 and in 9 patients in month 3, while 18 patients in the group 2 did not develop sacral pressure ulcers. No statistically significant differences were found between the two groups in the incidence of sacral pressure ulcers (p=0.136). In the Group 1, no cases of pelvic pressure ulcers were observed in month 1 and month 2 while 1 patient developed pelvic pressure ulcer in month 3 and 44 patients in the group 1 did not develop pelvic bed sores. In the Group 2, 5 patients developed pelvic pressure ulcers in month 1, 5 patients developed pelvic pressure ulcers in month 2 and 1 patients developed pelvic pressure ulcers in month 3, while 34 patient did not develop pelvic pressure ulcers. The incidence of pelvic pressure ulcer was statistically significantly lower in the Group 1 than the Group 2

(p=0.01). In total, 23 patients developed pressure ulcers in the Group 1 and 36 patients developed pressure ulcers in the Group 2. Pressure ulcers did not occur in 22 patients from the Group 1 and in 9 patients from the group 2. Overall incidence of pressure ulcers was statistically significantly lower in the group of patients who received prophylactic zinc oxide treatment (p=0.004) (Table 1). No statistically significant difference was found between the two groups in the average time to the occurrence of pressure ulcers (p=0.501) (Table 2).

#### Statistically analysis

The Kolmogorov-Smirnov analysis was used to test whether continuous variables were normally distributed. The independent samples t-test was used in the comparisons of normally distributed variables and the Mann-Whitney U test was used in the comparisons of non-normally distributed variables. The Chi -square test was used in the comparisons of categorical variables. Numerical continuous variables were presented as mean $\pm$  SD. A p value of 0.05 or less was considered statistically significant.

Conclusion: In line with the increases in life expectancy, elderly population is increasing in our country as with the rest of the World. Accordingly, bedridden population and the incidence of pressure ulcers are also increasing. Pressure ulcers can make life difficult for bedridden patients and their caregivers and are associated with a poor quality of life in bedridden patients who receive care at home or in nursing houses. Furthermore, the treatment of pressure ulcers poses a challenge to both patients and their caregivers and is associated with high costs. In this study, we concluded that when used before the development of any pressure ulcers, zinc oxide creams may prevent the occurrence of pressure ulcers, notably at the pelvic area. We did not find any studies on long-term used of such creams in the literature. We believe that complications associated with long term use of these creams needs to be investigated.

**Table 1.** Comparisons between patients who were treated with zinc oxide and who were not.

| Parameters                       | Group 1 (n=45) | Group 2 (n=45) | p                           |
|----------------------------------|----------------|----------------|-----------------------------|
| Sex (male/female)                | 22/23          | 26/19          | $\chi^2=0.714, p=0.398$     |
| Age                              | 83.8±9.57      | 78.55±10.65    | t=2.456, <b>p=0.016</b>     |
| Underlying health condition      | 34/11          | 28/17          | $\chi^2=1.866, p=0172$      |
| (dementia/stroke)                |                |                |                             |
| Heel pressure ulcers             |                |                | $\chi^2 = 4.525, P = 0.21$  |
| None                             | 33             | 24             |                             |
| Occurred at month 1              | 2              | 6              |                             |
| Occurred at month 2              | 6              | 8              |                             |
| Occurred at month 3              | 4              | 7              |                             |
| Sacral pressure ulcers           |                |                | $\chi^2=5.537, p=0.136$     |
| None                             | 26             | 18             |                             |
| Occurred at month 1              | 3              | 6              |                             |
| Occurred at month 2              | 5              | 12             |                             |
| Occurred at month 3              | 11             | 9              |                             |
| Sacral pressure ulcers           |                |                | $\chi^2 = 11.282, p = 0.01$ |
| None                             | 44             | 34             |                             |
| Occurred at month 1              | 0              | 5              |                             |
| Occurred at month 2              | 0              | 5              |                             |
| Occurred at month 3              | 1              | 1              |                             |
| Number of patients without       | 22             | 9              | $\chi^2 = 8.316, p = 0.004$ |
| pressure ulcers (overall)        |                |                |                             |
| Number of patients with pressure | 23             | 36             |                             |
| ulcers (overall)                 |                |                |                             |

*Table 2.* Comparison of patients who were treated with zinc oxide to those who were not, regarding the average time to the occurrence of pressure ulcers, where applicable.

| Parameter  | Group 1 n=23    | Group 2 n=36    | p                 |
|--|-----------------|-----------------|-------------------|
| The mean time to the occurrence of pressure ulcers | $2.34 \pm 0.77$ | $2.22 \pm 0.76$ | Z=-0.673, p=0.501 |

#### SÖZEL 6

USEFULNESS OF THE NEUTROPHIL-TO-LYMPHOCYTE RATIO TO PREDICTION DISEASE SEVERITY IN STABLE CHRONIC OBSTRUCTIVE PULMONARY DISEASE

#### Pelin Uysal<sup>1</sup>

<sup>1</sup>Department of Chest Diseases, Faculty of Medicine, Mehmet Ali Aydınlar University, Istanbul, Turkey.

#### Abstract

Objectives: Chronic obstructive pulmonary disease (COPD) is a preventable and treatable common disease characterized by progressive and permanent airflow limitation associated with increased chronic inflammatory response of the lungs and airways against harmful gases and particles. Many studies pointed out that neutrophil-to-lymphocyte ratio (NLR) are novel promising markers of inflammation or immunity. Our study aimed to evaluate whether the NLR were associated to disease severity in stable COPD or not. Method: We measured blood cell count in 170 individuals including 130 patients with COPD and 40 age-matched healthy subjects. COPD was staged according to GOLD criteria based on FEV1/FVC levels. Results: Our findings demonstrated that the COPD patients had higher levels of NLR than the healthy controls (p<0.001). The A and B group also had higher levels of NLR compared to the healthy controls (p<0.001). The C and D group also had higher levels of NLR compared to the A and B group (p<0.001). Significant negative correlation was found between NLR levels and FEV1 (r=-0.766; p<0.001) and FEV1/FVC (r=-0.604; p<0.001) in C and D group. NLR levels were positive correlated with WBC (r=469; p<0.001) in C and D groups. Conclusion: In the setting of COPD, the NLR were significantly increased and it may be pathophysiologically and clinically relevant in COPD. The NLR would be usefulness biomarkers of medical application to prediction disease severity in stable chronic obstructive pulmonary disease.

#### SÖZEL 7

EARLY REPOLARIZATION PATTERN ON EVERYDAY ELECTROCARDIOGRAM: A BENIGN ENTITY?

#### UZ. DR. MEHMET KÜÇÜK

Samsun Eğitim ve Araştırma Hastanesi Çocuk Kardiyoloji Bölümümü

Background and aim: Early repolarization pattern (ERP) is an umbrella term that refers to ST-segment elevation, terminal QRS slur, and terminal QRS notch in an asymptomatic individual. The prognostic significance of ERP detected in electrocardiograms (ECG) of healthy individuals remains to be elucidated. Some researchers has suggested ERP to be a benign incidental finding, while others reported that ERP is associated with life-threatening ventricular arrhythmias. Recently, Tp-e interval, Tp-e/QT and Tp-e/QTc ratio has emerged as novel noninvasive ECG markers of transmural distribution of ventricular repolarization. Prolonged Tp-e interval and increased Tp-e/QT, Tp-e/QTc ratios was found to be related to tendency of ventricular arrhythmias and sudden cardiac death (SCD). Our aim was to evaluate the transmural

distribution of repolarization (TDR) in otherwise healthy and asymptomatic children and adolescents with ERP.

Patients and Methods: Thirty-three children with early repolarization pattern in inferior and/or lateral precordial leads on ECG and thirty-two children without any early repolarization were compared in terms of new indices of transmural distribution of repolarization, namely Tp-e interval, Tp-e/QT ratio and Tp-e/QTc ratio. The Tp-e interval was measured from Tpeak (the highest point of the T wave) to Tend. Tend was defined as the intersection point of the tangent of the down slope of the T-wave and the isoelectric line. All Tp-e measurements were performed from precordial leads.

**Results:** The median age and weight was 13 (8–17) years and 60 (15–86) kg, respectively. Age and weight were not different between the case and control groups. The median Tp-e interval, Tp-e/QT and Tp-e/QTc in children with ERP was 60 (44–72) msn, 0.18 (0.14–0.23) and 0,16 (0.11–0.19), respectively. The median Tp-e interval, Tp-e/QT and Tp-e/QTc in control group was 64 (48–76) msn, 0.19 (0.12–0.23) and 0.17 (0.12–0.22), respectively. There was no difference between children with and without early repolarization in terms of Tp-e interval and Tp-e/QT, Tp-e/QTc ratios. (p> 0.05 in all). ERP was found to be present only on lateral leads in 3 cases, only on inferior leads in 15, on both inferior and lateral leads in 15 cases.

Conclusion: To our knowledge, this study is the first to evaluate the novel indices of transmural distribution of repolarization in individuals with ERP. We showed that TDR and thus the tendency of ventricular arrhythmias and SCD were not different between children and adolescents with and without ERP. Further studies are warranted to evaluate TDR in larger groups healthy inidividuals with different types of ERP.

| Lable: Hemogra | nhic and a | oloctrocard | liooranhic cl | haractoristics of | the cases |
|----------------|------------|-------------|---------------|-------------------|-----------|
| Table: Demogra | mic ana c  | ieciiocaia  | uograpiue ei  | inincierisiics of | me cuses. |

|                     | ERP Group (n:33) | Control Group (n:32) | P value |
|---------------------|------------------|----------------------|---------|
| Age                 | 13 (8–17)        | 14 (8–17)            | 0,37    |
| Male sex (%)        | 23 (69,7)        | 19 (59,4)            | 0,38    |
| Weight              | 60 (15–86)       | 59 (27–87)           | 0,98    |
| Heart rate          | 83,5 (59–97)     | 77 (58–99)           | 0,27    |
| Tp-e interval (msn) | 60 (44–72)       | 64 (48–76)           | 0,21    |
| Tp-e /QT            | 0.18 (0.14–0.23) | 0.19 (0.12–0.23)     | 0,16    |
| Tp-e/QTc            | 0,16 (0.11–0.19) | 0.17 (0.12–0.22)     | 0,14    |

*ERP:* Early repolarization pattern, *msn*: miliseconds. Data are expressed as median (minimum-maximum) and number (percentage) where available

#### SÖZEL 8

#### YENİDOĞAN ÜNİTESİNE YATIRILAN BEBEKLERDE VE ANNELERİNDE D VİTAMİNİ EKSİKLİĞİ

#### Abdurrahman Avar Özdemir, Uz. Dr.

Çocuk Sağlığı ve Hastalıkları, Medicine Hospital, Biruni Üniversitesi/İstanbul

#### *AMAÇ*:

Kalsiyum-fosfor dengesinde ve kemik mineralizasyonunda önemli bir rol oynayan, eksikliği raşitizm ve osteomalazi ile sonuçlanan D vitamininin eksikliği ve yetersizliği tüm dünyada olduğu gibi ülkemizde de önemli bir sağlık sorunu olmaya devam etmektedir.

Ülkemizde D vitamin eksikliğini önleyebilmek için 2005 yılında çocuklarda, 2011 yılında ise gebelerde D vitamin destek programları başlatılmıştır. Çocuklarda D vitamin desteği sonrasında yapılan çalışmalar raşitizm sıklığında azalma olduğunu göstermektedir. Ancak gebeler için başlatılan program sonrası yapılan çalışmalar sınırlı sayıdadır.

Bu çalışmanın amacı yenidoğan ünitesine yatırılan bebekler ve annelerinde D vitamini eksikliğinin sıklığını ve eşlik eden risk faktörlerini araştırmaktır.

#### YÖNTEM:

Bu çalışma Medicine Hospital/ Biruni Üniversitesi Çocuk Sağlığı ve Hastalıkları Yenidoğan Yoğun Bakım Ünitesine yatırılan bebekler ve anneleri üzerinde gerçekleştirildi. Prematüre doğum, kronik hastalığı olanlar ve aile onayı alınamayanlar çalışma dışında tutuldu. Çalışmada katılımcıların demografik verilerinin yanı sıra annelerin günlük güneş maruziyeti, giyim şekli ve gebelikte D vitamini kullanımı incelendi (Tablo 1). Kalsiyum, fosfor, alkalen fosfataz ve D vitamini (25-OH D) düzeyleri için kan örnekleri alındı. D vitamini düzeyleri "The Endocrin Society" önerilerine göre değerlendirildi (Eksiklik: <12 ng/ml, Yetersizlik: 12-20 ng/ml, Yeterli: >20 ng/ml). Veriler SPSS 20 kullanılarak değerlendirildi. Ortalama, standart sapma, minimum ve maximum değerler hesaplandı. Gruplar arasındaki ilişkinin, niteliksel ve niceliksel verilerin değerlendirilmesinde ki kare-testi, t- testi ve Kruskal-Wallis H testi kullanıldı.

#### BULGULAR:

Çalışmamız yenidoğan dönemindeki 62 anne ve bebek üzerinde gerçekleştirildi. D vitamini düzeyleri incelendiğinde annelerin ortalama serum düzeyi 9,87  $\pm 5$  ng/ml, bebeklerin ise 9,39  $\pm 5$ ,4 ng/ml olarak saptandı. Annelerin 46'sında (74,2%), bebeklerin ise 47'sinde (%75,8) D vitamini eksikliği tespit edildi. Anne ve bebek D vitamini düzeyleri arasındaki ilişki anlamlı bulundu (p=0,00; r=0,7). D vitamin eksikliği tespit edilen anne ve bebek gruplarında Ca düzeyi diğer gruplardan düşüktü ve bu fark istatistiksel olarak anlamlıydı (p=0,00).

Çalışmaya alınan annelerin ortalama yaşı  $29,3\pm 9$  yıldı. D vitamini düzeyi ile yaş, eğitim düzeyi, çocuk sayısı, sosyoekonomik düzey, D vitamini kullanımı, güneş ışığı maruziyeti ve mevsimler arasında istatistiksel olarak fark bulunamadı. Ancak D vitamin kullanan ve düzenli olarak güneşe çıkan annelerin D vitamini düzeyleri diğerlerinden yüksek bulundu (Tablo 1). Bebeklerin ortalama doğum haftası  $38,2\pm 1,3$  ve doğum ağırlığı  $3392,9\pm 495$  g olarak bulundu. Çalışmaya alınan bebeklerin doğum ağırlığı ve doğum haftası ile D vitamini düzeyi arasında anlamlı ilişki bulunmadı. Ancak cinsiyet ve doğum şekli ile D vitamini arasında istatistiksel olarak bir ilişki mevcuttu (Tablo 2).

#### *SONUC:*

Bu çalışma D vitamini eksikliğinin sosyoekonomik düzeyi düşük olan bölgemizde hala ciddi bir sorun olmaya devam ettiğini göstermektedir. Her ne kadar kısıtlı hasta grubu ile yapılsa da

gebelerin D vitamini kullanma sıklığı destek programlarına karşın oldukça düşük bulunmuştur. Gebelerin D vitamini eksikliği hakkında eğitim programları ile desteklenmesi bu konuda yardımcı olabilir.

Anahtar Kelimeler: Yenidoğan, Gebelik, D vitamini

#### **TABLOLAR**

*Tablo 1.* Annelerin demografik verilerinin D vitamini düzeylerine göre değerlendirilmesi.

|   | n (%)   | 25(OH)Dvit (ng/ml) (ort±SD)                         | p                 |
|---|---|---|-------------------|
| Gebe Kadınlar   | 62 (100%)   | 9,87 ±5,4   |                   |
| <i>Yaş (yıl)</i> <30 ≥30                              | 36 (58.1%)<br>26 (41.9%)                            | 10,28 ± 5,0<br>9,27± 5,9                            | 10.48             |
| Eğitim Düzeyi<br>İlkokul<br>Ortaeğitim<br>Yüksek okul | 15 (24.2%)<br>28 (45.2%)<br>19 (30.6%)              | 9,54 ± 6,7<br>9,36 ± 4,2<br>10,80± 5,9              | <sup>2</sup> 0,45 |
| Çocuk Sayısı<br>≤2<br>>2                              | 49 (%79)<br>13 (%21)                                | 10,33± 5,5<br>8,06 ±4,8                             | 10.17             |
| Sosyoekonomik düzey<br>Düşük<br>Orta<br>Yüksek        | 9 (14.5%)<br>50 (80.6%)<br>3 (%4,8)                 | 8,54 ± 7,9<br>10.0 ± 5.07<br>11,20±3,7              | <sup>2</sup> 0.58 |
| Günlük D vitamini alımı<br>Yok<br>Düzensiz<br>Düzenli | 21 (33,9%)<br>30 (48,4%)<br>11 (17,7%)              | $8,76 \pm 4,6$<br>$9,54 \pm 5,0$<br>$13,12 \pm 7,0$ | <sup>2</sup> 0.17 |
| Güneş ışığı maruziyeti<br>Düzenli<br>Düzensiz         | 16 (25,8%)<br>46 (74,2%)                            | 12,0 ± 7,7<br>9,14 ± 4,2                            | 10.19             |
| Giyim Şekli<br>Örtülü<br>Örtüsüz                      | 41 (66,1%)<br>21 (33,9%)                            | 9,21 ± 4,4<br>11,05 ± 6,7                           | 10.27             |
| Mevsimler<br>Kış<br>İlkbahar<br>Yaz<br>Sonbahar       | 29 (46,8%)<br>15 (24,2%)<br>8 (12,9%)<br>10 (16,1%) | $11,17 \pm 6,4$<br>$8,37 \pm 0,9$                   | <sup>2</sup> 0.8  |

CHANGES IN THE CLINICAL CHARACTERISTICS OF THE TREATED RETINOPATHY OF PREMATURITY PATIENTS ACCORDING TO NEONATAL INTENSIVE CARE UNIT

#### Emrullah Beyazyıldız

Sağlık Bilimleri Üniversitesi, Samsun Eğitim ve Araştırma Hastanesi

*Aim:* To investigate changes of the clinical features of treated retinopathy of prematurity (ROP) patients according to the neonatal intensive care unit (NICU).

Method: 102 eyes of the 51 patients who were referred from four different NICU's to our clinic were included in this study. Clinical features of this patients were evaluated retrospectively in between 2015-2017. Cases of the four different NICU's were comapred according to the birth weight, the week of birth, type of treatment performed and the post-gestational week of the treatment.

**Results:** The mean birth weights were  $1094 \pm 207.1$  (830-1400) gram, the mean birth week was  $27.6 \pm 1.74$  (25-30) week and the mean post-gestational week was  $37.7 \pm 2.0$  (35-41) week in group 1 (n=11). The mean birth weight was  $1325 \pm 446.5$  (830-2000) gram, the mean birth weight was  $28.6 \pm 2.6$  (25-32) week and the mean post-gestational week was  $38.3 \pm 3.0$  (33-43) week in Group 2 (n = 22). The mean birth weight was  $864 \pm 338.3$  (500-1980) gram, the mean birth week was  $26.5 \pm 2.2$  (24-31) week and the mean post-gestational week was  $37.6 \pm 2.7$  (33-43) week in Group 3 (n =19). The mean birth weight of the group 4 (n = 7) was  $1668 \pm 372.8$  (1300-2300) gram, the mean birth week was  $33.1 \pm 1.86$  (31-36) week and the mean postoperative gestational week was  $38.5 \pm 3.27$  (35-42) week in group 4 (n=7). Mean birth weight was significantly higher in group 4 than in all groups (p <0.05). Mean birth week was significantly higher in group 4 than in all groups (p <0.05). There was no difference between the groups in terms of mean post-gestational week (p> 0.05). There was no difference between the types of treatment performed between the groups (p> 0.05).

**Conclusion:** It is noteworthy that the birth week and birth weight were significantly higher in one YIBU. Type of the YIBU has effect on the clinical features of the ROP.

#### SÖZEL 10

EVALUATION OF CAROTID ARTERY INTIMA MEDIA THICKNESS IN PATIENTS WITH THE DIAGNOSIS OF CARDIAC SYNDROME X

# Macit KALÇIK<sup>1</sup>, Mahmut YESİN<sup>2</sup>

- 1- Department of Cardiology, Hitit University Faculty of Medicine, Corum
- 2- Department of Cardiology, Kars Harakani State Hospital, Kars

**Objective:** Cardiac syndrome X (CSX), also named as microvascular angina, is defined as effort angina with detectable ischemia on noninvasive tests without any evidence of stenosis or vasospasm of epicardial coronary arteries during invasive coronary angiography. Impaired

coronary microcirculation, inflammation, and insulin resistance resulting in endothelial dysfunction are accepted etiological factors for CSX. Recently carotid artery intima media thickness (CIMT) has been regarded as a marker of early atherosclerosis. Several studies have found an association between increased CIMT and the incidence of cardiovascular diseases in the general population. In this study, we aimed to evaluate CIMT values in patients with CSX. Methods: This study enrolled 145 patients (mean age: 53.2±9.1, male: 59) who diagnosed with CSX and 150 healthy controls (mean age: 56.7±7.4, male: 66) between May 2016 and January 2018. All patients were underwent transthoracic echocardiography and CIMT was measured with a linear probe from left common carotid artery. The CIMT was defined as the distance between the media-adventitia interface and the lumen-intima (Figure 1A). Patients who had angina pectoris with detectable ischemia on noninvasive tests such as treadmill stress test or myocardial perfusion scintigraphy and, without any evidence of stenosis or vasospasm of epicardial coronary arteries during invasive coronary angiography were diagnosed as CSX. Asymptomatic healthy controls without any detectable ischemia on noninvasive tests constituted the control group. All demographic, laboratory and echocardiographic parameters were recorded into a dataset and compared between CSX patients and controls.

**Results:** There was no significant difference in terms of demographic parameters between CSX patients and the controls. Furthermore laboratory and echocardiographic parameters were similar between CSX patients and the controls (Table 1). The mean CIMT value was significantly higher in CSX patients than the controls  $(0.58 \pm 0.13 \text{ vs. } 0.52 \pm 0.11 \text{ mm}; p < 0.001)$  (Figure 1B). In ROC curve analyses, CIMT values above 0.54 mm predicted CSX with a sentivity of 59% and a specificity of 52% (AUC: 0.605; 95% CI: 0.540 to 0.669; p=0.002) (Figure 1C).

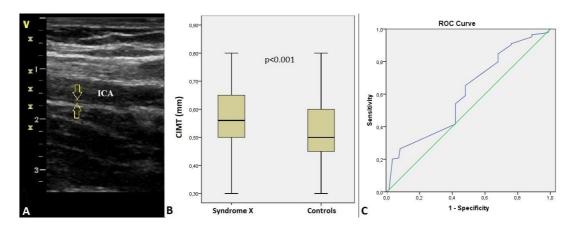
Conclusion: CIMT values were observed significantly higher in CSX patients as compared to healthy controls. Increased CIMT values may be associated with mechanisms that play role in the pathogenesis of CSX.

| Table 1                   | Cardiac Syndrome  | Control Group         | P value |
|---------------------------|-------------------|-----------------------|---------|
|                           | $\boldsymbol{X}$  | n=150                 |         |
|                           | n=145             |                       |         |
| Demographic parameter     | 'S                |                       |         |
| Age, years                | 53.2±9.1          | 56.7±7.4              | 0.282   |
| Gender-male, n(%)         | 59 (%40)          | 66(%44)               | 0.684   |
| $BMI, (kg/m^2)$           | 30.1 (25.9-33.12) | 29.7 (26.75-<br>32.4) | 0.596   |
| SBP (mmHg)                | 147.9±18.8        | 144.3±15.6            | 0.338   |
| DBP (mmHg)                | 84.3±10.1         | 83.1±10.9             | 0.622   |
| Heart Rate (beats/min)    | 77.7±13.7         | 73±10.4               | 0.073   |
| <i>Hypertension, n(%)</i> | 49 (34)           | 39 (26)               | 0.133   |
| Diabetes Mellitus, n(%)   | 24 (16.7)         | 18 (12)               | 0.253   |
| Dyslipidemia, n(%)        | 27 (18.8)         | 37 (24.7)             | 0.219   |
| Smoking status, n(%)      | 33 (22.9)         | 28 (18.7)             | 0.369   |
| Echocardiographic para    | meters            |                       |         |
| LV EF (%)                 | 65±5.5            | 66±4.9                | 0.410   |
| LAD, (cm)                 | 38 (36-40)        | 38(36.75-40)          | 0.584   |
| LVEDD, (cm)               | 4.6 (4.3-4.9)     | 4.4 (4.1-4.9)         | 0.176   |
| LVESD, (cm)               | 2.92±0.45         | 2.94±0.46             | 0.807   |

|                         | T                | 1               |       |
|-------------------------|------------------|-----------------|-------|
| IVST, (cm)              | 11 (11-12)       | 11 (11-12)      | 0.072 |
| PWT, $(cm)$             | 11 (11-12)       | 11 (11-12)      | 0.870 |
| E(cm/s)                 | 0.6(0.5-0.7)     | 0.7 (0.5-0.9)   | 0.272 |
| A (cm/s)                | 1(0.8-1)         | 0.95 (0.7-1)    | 0.253 |
| Laboratory parameters   |                  |                 |       |
| Glucose, (mg/dL)        | 96.4±11.1        | 95.7±10.5       | 0.774 |
| BUN, $(g/dL)$           | 27.6±9.6         | 33.4±12.3       | 0.224 |
| Creatinine, (g/dL)      | 0.81±0.17        | $0.77 \pm 0.17$ | 0.263 |
| AST, $(U/L)$            | 21 (17.75-26)    | 20.5(18-23.75)  | 0.501 |
| ALT, $(U/L)$            | 21 (13.75-29.25) | 21(16-29.5)     | 0.997 |
| Uric Acid (mg/dL)       | 4.91±1.0         | 4.80±1.0        | 0.723 |
| Total Bilirubin (mg/dL) | 0.6 (0.4-0.9)    | 0.7 (0.5-0.8)   | 0.677 |
| LDL (mg/dL)             | 127.7±29.8       | 137.5±39.9      | 0.194 |
| HDL (mg/dL)             | 41 (35-49)       | 43 (38-52)      | 0.296 |
| Triglycerides (mg/dL)   | 169.7±94.7       | 170.6±97.7      | 0.971 |
| Total Cholesterol       | 188.4±29.9       | 205.1±48.2      | 0.060 |
| (mg/dL)                 | 100.4=29.9       | 203.1±40.2      | 0.000 |
| Hemoglobin (g/dL)       | 14.07±1.65       | 14.02±1.88      | 0.859 |
| White Blood Cell,       | 7.97±1.98        | 8.37±1.94       | 0.193 |
| $(x10^3/dL)$            | /.7/±1.70        | 0.3/=1.94       | 0.193 |
| Platelet, $(x10^3/dL)$  | 241.7±49.9       | 243.3±52.2      | 0.881 |

(A: Atrial A wave, ALT: Alanine Aminotransferase, AST: Aspartate Aminotransferase, BMI: Body mass index, BUN: Blood urea nitrogen, DBP: Diastolic blood pressure, E: Atrial E wave, HDL: High density lipoprotein, IVST: Interventricular septal thickness, LAD: Left atrial diameter, LDL: Low density lipoprotein, LVEF: Left ventricular ejection fraction, LVESD: Left ventricular end systolic diameter, LVEDD: Left ventricular end diastolic diameter, PWT: Posterior wall thickness, SBP: Systolic blood pressure)

Figure 1: Carotid artery intima media thickness was measured from left common carotid artery and defined as the distance between the media-adventitia interface and the lumen-intima (A). The mean CIMT value was significantly higher in cardiac syndrome X patients than the controls (B). ROC curve graph demontrating the area under the curve (C) (ICA: Internal carotid artery, CIMT: Carotid artery intima media thickness).



#### TOBACCO USE OF THE HEALTHY AGING INDIVIDUALS

Neslihan ÖZÇELİK¹, Tuğba UYAR ², Songül ÖZYURT³

- 1) Kaçkar State Hospital, Department of Chest Disease, RİZE, TURKEY
- 2) Recep Tayyip Erdogan University, Department of Neurology, RİZE, TURKEY
- 3)Recep Tayyip Erdogan University, Department of Chest Disease, RİZE, TURKEY

#### Aim and Objective:

Healthy aging is physical, social and mental well-being; the ability to live independently; the preservation and improvement of the quality of life and as well as optimizing the opportunities to ensure successful transitions between life processes among the lifetime. The negative effects of smoking on health, social and economic dimensions have been known for a long time. Cigarette smoking is a major cause of diseases such as heart disease, stroke, chronic lung disease and lung cancer, which are among the major diseases and causes of death in the elderly. On the other hand, regardless of the age of the patient, the likelihood of these illnesses declining in the period following the release of the cigarette. Therefore, efforts should be made for smoking cessation in people of all ages.

#### Methods:

Thirty six patients were included to the study, who were older than 65 years old and who were independent in their daily life activities were admitted to Kaçkar State Hospital with nonspecific complaints and no known chronic illnesses. Vital signs, saturation, ECG findings, smoking and alcohol dependence, sleep quality, BMI, bone densitometry, minimental test and geriatric depression scales were evaluated. Occupational history and additional diseases were examined in the study. Data analysis was performed with SPSS program.

#### Results:

Of the patients, 48.5% were male and 51.5% were female, mean age was 82 and mean BMI was 19.5. Additional diseases that were diagnosed after the examination of our patients were 45% HT, 8% COPD and 28% osteoporosis disease. The average of the saturation was 94 and the heart rate was 75. When smoking status was assessed, 68% of the patients never smoked in their life and there were no patients currently ongoing. 95% of COPD patients had previous history of smoking.

#### Conclusion:

Populations in our world and our country are aging rapidly. When the concepts of healthy aging and super aging are considered, smoking is seen as an important risk factor in terms of additional diseases in old age. In our country, significant progress has been made in smoking cessation policlinics in recent years. But usually young or elderly patients with additional diseases are admitted to these clinics. It is necessary to raise awareness about healthy old age and especially to question the situation of smoking in patients aged 65 years and over, to inform about the benefits of smokers to quit smoking and to encourage them to quit.

#### Funding:

There is no conflict of interest.

### A CASE OF GENERALIZED PHTHIRUS PUBIS

Mustafa Aksoy <sup>1</sup>, <u>Sevda Önder <sup>2</sup></u>

- 1- Harran University, Faculty of Medicine, Department of Dermatology, Asistant Professor, Şanlıurfa, Turkey
- 2- Ordu University, Faculty of Medicine, Department of Dermatology, Asistant Professor, Ordu, Turkey

#### Abstract

Pediculosis pubis is the infestation of hair-covered areas. The clinical manifestation, in which Phthirus pubis is the pathogen, is typically seen in the upper part of the pubis, abdomen and femoral region. Itching, popular urticaria and excoriations which may vary from mild to moderate are observed clinically. It is spread from person to person by close physical contact such as sleeping in the same bed or sexual intercourse. Here, we presented a 45-year-old male patient with pediculosis pubis which started from the inguinal area and spread to the whole body, leading to generalized pruritus, and we aimed to draw attention to the fact that phthirus pubis infestation may be generalized.

**Keywords**: Phthirus pubis, generalized pediculosis pubis.

#### Introduction

Pediculosis pubis (PP), ie Phthirus pubis (PtP), which is the pubic louse, often is spread by sexual contact, contaminant toilets or clothing and bedding. <sup>[1]</sup> It is rarely seen in children since it is sexually transmitted. <sup>[2]</sup>The main symptom is pruritus, usually in the hair-covered areas of the pubic region. In adults, pubic and axillary regions are the regions most affected, and perineum, thigh, leg, trunk, upper arm, wrist, nipple in men and occasionally beard and mustache regions may be involved. <sup>[3]</sup>Here, a case of a 45-year-old male patient with PP that started in inguinal region and spread to the whole body and lead to generalized pruritus were presented. And it was aimed to note that generalized infestation with PtP may be seen even though it is rare.

#### Case report

A 45-year-old male patient was admitted to our outpatient clinic with complaints of itching that started from the groin area 2 weeks ago, and spread sublingually, around the umbilicus, and all over the body. The patient did not have a characteristic feature in his medical history, his partner did not have similar complaints and he was working as a taxi driver. He stated that he saw small moving organisms in his body. Dermatologic physical examination showed frequent moving organisms with common yellowish brown color around axillary regions, pubic regions, inguinal folds, arms, legs, chest anterior face, back, nipples and around the umbilicus [Figure - 1]. These organisms were not seen in scalp, eyelashes and eyebrows. The organism was taken with tweezers and microscopic examination showed PtP parasites which were 1-2 mm in length, had yellowish brown color, antenna, round body and three pairs of legs. The patient who was diagnosed with generalized PP was treated with two cycles of permethrine therapy for one week. The hairy areas were shaved. Two weeks after cleansing contaminant clothes and sheets, the patient's complaints decreased.

#### Discussion

Louse infestation, also known as pediculosis, is very common in humans. Pediculus humanus capitis (responsible for the head lice), pediculus humanus corporis (responsible for the body lice) and PtP (responsible for the pubic lice) are causes of these infestations. [4]

Phthirus pubis often spread with sexual contact, contaminating toilets or clothes and bedding. It can stay alive 2-10 days depending on the temperature outside the body. They are often buried in the hair follicle and may be difficult to identify as they are small in size. Body regions with intensive hair follicles, especially pubic and perianal regions may be involved. It may rarely infestate eyebrows and eyelashes. [1] There were numerous parasites in arms, legs, pubic region, inguinal folds, armpits, nipples, anterior trunk and back of the patient, and there was no involvement in eyebrows, eyelashes and hair. This generalized involvement of PP in this way is not frequent and has been reported in a small number of cases in the literature. [5-8]

Severe itching is the first symptom and it is more common at nights. Wounds and secondary infections due to itching, papules and pale macular lesions on blood-sucking areas may develop. Our patient was admitted to our out-patient clinic with severe itching and there was no wound, excoriation, macular or papular lesions due to itching on the skin examination.

Pediculosis pubis is diagnosed by the identification of live lice. A microscopic examination of one organism taken from the patient revealed PtP parasites. Since transmission is achieved by establishing a close contact, PP patients should be carefully investigated in terms of other sexually transmitted diseases. <sup>[9]</sup>In our case, the tests for HSV, hepatitis, syphilis and HIV markers were normal.

In treatment of PP infestation, permethrine 1% creme, lindane 1% shampoo and phyrethrines with piperonylbutoxite are used. Other effective agents are; 0.5 % malathion, 0.5-1% carbaryl and 0.2 % fenotrine. In addition, all bedding, towels and clothes should be washed. Patients should avoid contact with their sexual partners during treatment. The patient's wife had no similar complaints, avoiding sexual intercourse until recovery is achieved. Some patients may require a second cure after 3-7 days of treatment. [9] Since the complaints continued after the first cure in our patient, one more cycle of permethrine treatment was administered one week later.

Very few studies have been reported in the literature on generalized PP infestations. Our case has been presented in order to take into account that the PtP infestation, which often involves the pubic and axillary regions, may be generalized and to contribute to the literature.

**Sources of support**: The cost of the study was covered by the researchers and no financial aid was received from any person or institution.

*Conflicting interest:* There is no conflict of interest.

# References

- 1. Kılıç Ü, Demiray T, Erdem T, YılmazK, Köroğlu M, Altındiş M.A case of parasitic skin infestation presented with non-typical patient history. Online Turkish Journal of Health Sciences 2016;1:34-7.
- 2. Dehghani R, Limoee M, Ahaki AR. First report of family infestation with pubic louse (Pthirus pubis; Insecta: Anoplura: Pthiridae) in Iran--a case report. Trop Biomed2013;30:152-4.
- 3. Mumcuoglu KY. Pubic louse (Pthirus pubis) infestation of the scalp in a 4-years old infant. Cumhuriyet Medical JournalCase Report 2015;37:241-3.

- 4. El-Bahnasawy MM, Abdel FE, Morsy TA.Human pediculosis: a critical health problem and what about nursing policy? JEgypt SocParasitol2012;42:541-62.
- 5. Nakamura S, Nakamura S, İto F, Munakata A. Generalized pediculosis pubis infestation. J Dermatol1905;12:94-6.
- 6. El-Sibae MM.Generalized pediculosis due to Phthirus pubis. J Egypt SocParasitol1991;21:593.
- 7. Klaus S, Shvil Y, Mumcuoglu KY.Generalized infestation of a 3 1/2-year-old girl with the pubic louse. Pediatric Dermatology1994;11:26-8.
- 8. Bessis D, ChraibiH, Guillot B, Guilhou JJ. Erythema annularecentrifugum induced by generalized Phthirus pubis infestation. British JDermatol2003;149:1291.

Leone PA. Scabies and Pediculosis Pubis. An Update of Treatment Regimens and General Review. Clin Infect Dis2007;44:153–9.

[Figure - 1].





Figüre 1: Numerous yellowish brown papular lesions in the pubic region, axillary region and abdomen

# SÖZEL 13

ANESTHETİC MANAGEMENT İN AN İNFANT WİTH MUCOPOLYSACCHARİDOSİS AND HYDROCEPHALUS UNDERGOİNG VENTRİCULOPERİTONEAL SHUNT SURGERY

<u>Ayca Sultan Sahin</u>, MD; Ziya Salihoğlu, Prof Dr Kanuni Sultan Suleyman Education and Training Hospital, Istanbul 34034, Turkey

Introduction: The mucopolysaccharidoses (MPS) are a group of lysosomal storage diseases with many skeletal and airway features that pose a challenge to anesthetists. Patients with MPS present as one of the most difficult airway problems to be managed by anesthesiologists.

Hydrocephalus with increased intracranial pressure is a frequent complication seen in these patients. Before, after and during anaesthesia must be well prepared with this respect. We describe the successful anesthetic management of an infant with MPS who underwent ventriculoperitoneal shunt surgery for hydrocephalus.

Case Report: An 1-year-old boy with a known history of MPS was scheduled for elective ventriculoperitoneal shunt surgery for hydrocephalus under general anesthesia. The physical exam revealed micrognathia, short neck, restricted mouth opening, frontal bossing with large forehead, and macroglossia. In the operating room, anesthesia was induced with fentanyl 1µg/kg and propofol 2 mg/kg; Mask ventilation with oxygen was done but was difficult. Rocuronium 0.5 mg/kg was given for neuromuscular blockade. Tracheal intubation was attempted using Macintosh laryngoscope blade size # 1 and a laryngoscopic view of CL grade III was achieved with optimal external laryngeal manipulation, with cricoid pressure and an uncuffed ETT of 4 mm ID was passed blindly beneath the epiglottis. Correct position of the ETT was confirmed by bilateral chest auscultation and capnography. Operation was uneventful and with sugammadex 1mg/kg patient was extubated after reversal of residual neuromuscular blockade.



Conclision: Airway management in children with MPS presenting with acute hydrocephalus is challenging and requires a fine balance between neuroanesthetic principles and difficult airway management techniques. We thought that using sugammadex is an another chance for reversing neuromuscular blockade for extubation in paediatric patients.



**Key words:** Mucopolysaccharidosis, Hydrocephalus, Airway, Anesthetic management, Sugammadex

#### SÖZEL 14

HOSPİTAL-ACQUİRED INFECTION RATES AND MİCROORGANİSMS İN OUR PALLİATİVE CARE UNİT

Ayça Sultan Şahin, MD; Ziya Salihoğlu, Prof Dr.

SBUKanuni Sultan Suleyman Education and Training Hospital, Department of Anesthesiology and Reanimation, Istanbul.

Aim: Infections are fairly frequent with patients in palliative care unit and it usually cause death. Malnutrition, decubitis, immunosuppression, blurring of consciousness, permanent urinary catheter increase the risk of infections. The most frequent infection in palliative care is respiratory tract infections and the second is urinary tract infections.

Table 1. Hospital-acquired Infection Rates

| Type of Infection       | Number of Infection | Rate of Infection | Percent (%) |
|-------------------------|---------------------|-------------------|-------------|
| Blood stream infection  | 12                  | 5.52              | 12.16       |
| Pneumonia               | 8                   | 3.68              | 8.12        |
| Urinary tract infection | 4                   | 1.84              | 4.04        |
| Total                   | 24                  | 11                | 24.32       |

Method: Between January 2017-January 2018, infection frequency and causative microorganisms were evaluated in our unit. Infection rates up to 50 percent are normal. It is within acceptable limits between 50-75 and 75-90, attention should be paid to infection control measures. On the 90th percentile, infection control measures must be observed.

Results: In our unit, 24 hospital infections occurred between January 2017-January 2018, the frequency was determined as 24.32% (Table-1). The total number of patients was 436, patients day were 1987. Ventilator usage rate was found to be less than 10 percentile, and ventilator related pneumonia density was found to be between 25-50 percentile. Urinary catheter rate was found to be below 10 percentile, and the frequency of catheter-related urinary system infection was found to be between 25-50 percentile. The frequency of central venous catheter-related was below 10 percentile, the frequency of central venous catheter infection (SVC-RI) was increased to 75-90 percentile due to the use of central catheter. Between January 2017-January 2018, five microorganisms (Candida albicans (8), Escherichia coli (4), Klebsiella pneumoniae (4), Pseudomonas aeruginosa (4) and Stenotrophomonas maltophilia (4)) were determined that cause nosocomial infections in our unit.

Conclusion: To reduce rate of ventilator related pneumonia, proper ventilator care, isolation rules and hand hygiene should be considered. Antisepsis rules should be followed while catheters are inserted, to avoid urinary tract infections and SVC-RI. In order to prevent infections, trainings are given by 'Infection Control Committee' in our Hospital, such as 'Hand Hygiene, Personal Protective Equipment Use, Isolation Measures, Waste Management and Hospital Cleaning'.

# SÖZEL 15

THE INCIDENCE OF TUBERCULOSIS IN HEALTH CARE WORKERS OF EASTERN BLACK SEA REGION: A CROSS-SECTIONAL STUDY

#### Songul Ozyurt, MD.

Recep Tayyip Erdogan University Medical School, Department of Chest Diseases , Rize-TURKEY

**Objective:** The aim of this study was to investigate the frequency of positive history of tuberculosis, the rate of individuals who underwent tuberculin skin test (TST) before the beginning of their current job, previous tuberculosis treatment and other related variables in health institutions in Eastern Black Sea Region.

**Method**: A questionnaire containing tuberculosis and related variables was created by the authors of the study. The data obtained from the questionnaire was transferred to the SPSS program for analysis. Categorical variables were expressed in terms of frequency (n) and percent (%), continuous variables expressed as arithmetic mean, median, standard deviation and

minimum-maximum values. Chi-square, Fisher's exact test and Mann-Whitney U tests were used in the binary comparisons. P < 0.05 significance level was accepted.

**Results:** A total of 460 health care workers 69.3% of the cases were female (n = 319) and 30.7% (n = 141) were male. 47% (n = 216) of the cases were from Rize training and research hospital and 24.6% (n = 113) were from Hopa state hospital and 58% of cases were assisted health personnel (all employees except nurses and doctors). The median age was 32 years with a minimum of 17 and a maximum of 63 years. Out of the total participants 8 health care workers (1.7%) had a tuberculosis history. No significant relationship was found between gender, smoking, presence of another comorbid medical disorder, and presence of Tbc (p > 0.05 for all variables). It was found that the cases were similar to each other in terms of variables such as BCG vaccination or TST on the job application (p > 0.05). However, positive tuberculosis history of family members and TST positivity was significantly higher in tuberculosis group. The cases with tuberculosis were found to be similar to those who did not have tuberculosis in terms of age, BMI ( $kg/m^2$ ), smoking duration (years) (p > 0.05 for all). However, the median level of work experience (in years) was higher in those with tuberculosis than those without tuberculosis (15 years versus 5 years, z = -1.891, p = .059).

**Conclusion**: In this study, the frequency of tuberculosis among healthcare workers was found to be 1.7%. Having a tuberculosis history in the family and TST positivity was found to be significantly higher in cases with tuberculosis.

#### Funding:

There is no conflict of interest.

Table 1. Distribution of participants' organizations and professions

|                            | Total<br>(n=460)<br>100.0% | Not-Tuberculosis<br>(n=452)<br>98.3% | Tuberculosis (n=8)<br>1.7% | Statistics |                |
|----------------------------|----------------------------|--------------------------------------|----------------------------|------------|----------------|
|                            | n (%)                      | n (%)                                | n (%)                      | χ²         | p <u>value</u> |
| Hospitals                  |                            |                                      |                            | 3.732*     | .358           |
| Rize training and research | 216 (47.0)                 | 214 (47.3)                           | 2 (25.0)                   |            |                |
| Hopa <u>state</u> hospital | 113 (24.6)                 | 110 (24.3)                           | 3 (37.5)                   |            |                |
| Artvin state hospital      | 75 (16.3)                  | 72 (15.9)                            | 3 (37.5)                   |            |                |
| Arhavi state hospital      | 35 (7.6)                   | 35 (7.7)                             | 0                          |            |                |
| state hospital             | state hospital             | 21 (4.6)                             | 0                          |            |                |
| Total                      | 460 (100.0)                | 452 (100.0)                          | 8 (100.0)                  |            |                |
| Healthworkers              |                            |                                      |                            | 1.973*     | .323           |
| Supportive-healthworker    | 267 (58.0)                 | 260 (57.5)                           | 7 (87.5)                   |            |                |
| Nurses                     | 151 (32.8)                 | 150 (33.2)                           | 1 (12.5)                   |            |                |
| Doctors                    | 42 (9.1)                   | 42 (9.3)                             | 0                          |            |                |
| Toplam                     | 460 (100.0)                |                                      | 8 (100.0)                  |            |                |

<sup>\*:</sup> Fisher's exact test

Table 2. Comparison of tbc presence in terms of demographic variables

|                                  | Total      | Not-Tuberculosis | Tuberculosis |            |         |
|----------------------------------|------------|------------------|--------------|------------|---------|
|                                  | (n=460)    | (n=452)          | (n=8)        | Statistics |         |
|                                  | 100.0%     | 98.3%            | 1.7%         |            |         |
|                                  | n (%)      | n (%)            | n (%)        | χ²         | p value |
| Gender                           |            |                  |              | 3.885*     | .062    |
| Female                           | 319 (69.3) | 316 (69.9)       | 3 (37.5)     |            |         |
| Male                             | 141 (30.7) | 136 (30.1)       | 5 (62.6)     |            |         |
| Smoking                          |            |                  |              | 1.074*     | .529    |
| Yes                              | 121 (26.3) | 118 (26.1)       | 3 (37.5)     |            |         |
| No                               | 339 (73.7) | 334 (73.9)       | 5 (62.5)     |            |         |
| Never-smoked                     | 330 (71.7) | 325 (71.9)       | 5 (62.5)     |            |         |
| Quited                           | 9 (2.0)    | 9 (2.0)          | 0            |            |         |
| Medical disease                  |            |                  |              | 0.539*     | .364    |
| Yes                              | 72 (15.7)  | 70 (15.5)        | 2 (25.0)     |            |         |
| No                               | 388 (84.3) | 382 (84.5)       | 6 (75.0)     |            |         |
| BCG vaccination                  |            |                  |              | 0.759*     | .686    |
| Yes                              | 341 (74.1) | 334 (73.9)       | 7 (87.5)     |            |         |
| No                               | 119 (25.9) | 118 (26.1)       | 1 (12.5)     |            |         |
| PPD test (during work admission) |            |                  |              | 3.166*     | .095    |
| Yes                              | 109 (23.7) | 105 (23.2)       | 4 (50.0)     |            |         |
| No                               | 351 (76.3) | 347 (76.8)       | 4 (50.0)     |            |         |
| Tuberculosis of family members   |            |                  |              | 38.220*    | <.001   |
| Yes                              | 46 (10.0)  | 40 (8.8)         | 6 (75.0)     |            |         |
| No                               | 414 (90.0) | 412 (91.2)       | 2 (25.0)     |            |         |
| PPD positivity                   |            |                  |              | 78.540*    | <.001   |
| Positive                         | 5 (1.1)    | 0                | 5 (62.5)     |            |         |
| Negative                         | 458 (98.9) | 452 (100.0)      | 3 (37.5)     |            |         |

<sup>\*:</sup> Fisher's exact test

Table 3. Continuous variables of cases with or without tuberculosis

|                           |     | Total<br>(n=460)<br>100.0% | Not- <u>Tuberculosis</u><br>(n=452)<br>98.3% | Tuberculosis<br>(n=8)<br>1.7% | Statistics |                |
|---------------------------|-----|----------------------------|--|-------------------------------|------------|----------------|
|                           | n   | M (min-max)                | M (min-max)                                  | M (min-max)                   | z          | p <u>value</u> |
| Age (years)               | 460 | 31 (17-63)                 | 32 (17-63)                                   | 25 (18-47)                    | -0.122     | .903           |
| BMI (kg/m²)               | 443 | 24.4 (14.8-45.7)           | 24.4 (14.8-45.7)                             | 26.3 (20.3-35.2)              | -0.400     | .689           |
| Smoking (/years)          | 74  | 10 (0.25-35)               | 10 (0.25-35)                                 | 7.5 (5-10)                    | -0.824     | .410           |
| Working duration (/years) | 274 | 5 (0.2-40)                 | 5 (0.2-40)                                   | 15 (10-23)                    | -1.891     | .059           |

Table 4. Demographics and clinical features of those had tuberculosis (n=8)

|                             | _      | %                |
|-----------------------------|--------|------------------|
| M. I. I. I. I. I. I.        | n      | %                |
| Working during tuberculosis |        |                  |
| Yes                         | 7      | 87.5             |
| No                          | 1      | 12.5             |
| Which units in which worked |        |                  |
| Internal medicine           | 3      | 37.5             |
| Emergency service           | 2      | 25.0             |
| Surgery                     | 1      | 12.5             |
| Unkown                      | 1      | 12.5             |
| Not-working                 | 1      | 12.5             |
| Tuberculosis location       |        |                  |
| Lung                        | 7      | 87.5             |
| Pleura                      | 1      | 12.5             |
|                             |        |                  |
|                             | Median | Minimum-maksimum |
| Treatment (days)            | 180    | 180-285          |
|                             |        |                  |
|                             | n      | %                |
| Treatment type              |        |                  |
| Outpatient                  | 6      | 75.0             |
| Inpatient                   | 2      | 25.0             |
| Treatment resistance        |        |                  |
| No                          | 8      | 100.0            |
| Yes                         | 0      | 0                |

# HELICOBACTER PYLORI İNFEKSIYONU ILE MIDE KANSERI ARASINDA İLIŞKI

<u>Sercan Büyükakıncak</u>, Akçaabat Haçkalı Baba Devlet Hastanesi, Genel Cerrahi Bölümü Birgül Tok, Akçaabat Haçkalıbaba Devlet Hastanesi, Patoloji Bölümü Gökay Ateş, Akçaabat Haçkalı Baba Devlet Hastanesi, Anestezi ve Reanimasyon bölümü Banu Karapolat, Trabzon Kanuni Eğitim ve Araştırma Hastanesi, Genel Cerrahi Bölümü İzzettin Kahraman, Trabzon Kanuni Eğitim ve Araştırma Hastanesi, Genel Cerrahi Bölümü

GİRİŞ: Mide kanseri dünyada en yaygın görülen ikinci ve gastrointestinal sistemin ise en sık görülen kanser türüdür.50 yaş üzerinde ve erkeklerde iki kat daha fazla görünmektedir.ve halen malign hastalıklardan dolayı oluşan ölümler arasında önemli bir yer tutmaktadır. Helikobakter pilori (HP)enfeksiyonu direkt mutajenik değildir. Kronik gastritin ana nedenlerinden biridir ve buna bağlı olarak meydana gelen intestinal metaplazi ve hipoklorhidri ileri yaşlarda mide kanseri gelişmesi için uygun bir ortam meydana getirmektedir.HP üreaz ve amonyak etkisi ile epitelyum hasarı oluşmakta, intestinal tip epitel mide mukozasının yerini almakta ve asit sekresyonu azalarak diğer bakterilerin kolonize olmasına uygun bir ortam oluşmaktadır. Bu bakteriler de nitratları nitrite dönüştürerek kanser oluşumuna zemin hazırlamaktadırlar. Aynı zamanda mide lenfoması oluşumunda da rol oynamaktadır.

AMAÇ: Bu çalışmada kliniğimizde gastroskopi yapılıp mide kanseri tanısı alan hastalarda , hastalığın intestinal metaplazi ve Helikobakter pilori ile ilişkisinin sunulması amaçlanmıştır.

GEREÇ-YÖNTEM: Ocak 2014-Temmuz 2018 tarihleri arasında endoskopi ünitemizde gastroskopi yapılıp mide kanseri tanısı alan 64 hastanın; demografik özellikleri, patoloji sonuçları, intestinal metaplazi ve Helikobakter pilori görülme oranları açısından retrospektif olarak değerlendirilmiştir.

BULGULAR: Çalışmamızdaki toplam 64 vakanın, yaş ortalaması 65,64±15,50 idi. Olguların %71,90'ı (n=46) erkekti, %28,10'u (n=18) kadındı. Patoloji sonuçlarına göre %92,20 (n=59) adenokarsinom, bunlarında %22 side (n=13) taşlı yüzük hücreli adenokarsinom idi. Geri kalanlarıda % 7,80 (n=5) malign epitelyal tümör olarak saptandı. Literatürde mide kanserlerinin patolojisi %95 oranında adenokanser gelmekte ve yerleşim olarakta %35 oranında antrum-pilor, %15 korpus-fundus, %50 kardia da olmaktadır. Vakaların tümörlerinin lokalizasyonları tablo 1'de gösterilmiştir. Vakaların % 76,60'ında (n=49) Helicobacter Pylori (HP) pozitif iken; % 23,40'ında (n=15) negatif idi. İntestinal metaplazi (İM) olanların oranı % 68,80 (n=44) iken; %31,20 (n=20) olguda negatif idi. Kanser tipi ile HP ve İM pozitifliği arasında ilişki saptanamadı (sırasıyla p=0,358, 0,347). Cinsiyet ile HP ve İM pozitifliği arasında ilişki saptanamadı (sırasıyla p=0,100, 0,773).

SONUÇLAR: Bölgemizde mide kanserii en sık görülen ikinci kanser türüdür. Mide kanserlerinde populasyon taramaları ve düzenli klinik muayene, endoskopik değerlendirme erken tanı ve tedavisinde önemli rol oynar. HP antikor pozitifliği ile mide kanseri arasında güçlü bir ilişki olduğu bildirilmektedir. Çalışmamızda HP ile mide kanseri ilişkisi gösterilememekle birlikte erken dönemde tanınarak tedavi edilmelerinin bu enfeksiyonla bağlantılı intestinal metaplazi gibi prekanseröz lezyonları önleyebileceğini düşünmekteyiz.

Anahtar Kelimeler: Helikobakter pilori, intestinal metaplazi, mide kanseri

Tablo 1. Tümör lokalizasyonları

|                                | Sayı | Yüzde (%) |
|--------------------------------|------|-----------|
| Antrum korpus<br>bileşkesi     | 1    | 1,6       |
| Antrum                         | 22   | 34,4      |
| Antrum / İncisura<br>Angularis | 1    | 1,6       |
| Fundus                         | 2    | 3,1       |
| İncisura Angularis             | 10   | 15,6      |
| Kardia                         | 12   | 18,8      |
| Korpus                         | 8    | 12,5      |
| Özofagus - Kardia              | 6    | 9,3       |
| Pilor                          | 2    | 3,1       |
| Toplam                         | 64   | 100,0     |

CORONARY VESSEL CALCIFICATION RATE AND ITS ASSOCIATION WITH CARDIAC SYMPTOMS OF ELDERLY PATIENTS WHO UNDERWENT PET CT SCAN DUE TO MALIGNANCIES

<u>Dr. Sibel GÖKSEL</u>, Nükleer Tıp Uzm. Dr., T.C. Sağlık Bakanlığı Recep Tayyip Erdoğan Üniversitesi Eğitim ve Araştırma Hastanesi / RİZE

#### Introduction

Positron Emission Tomography/Computed Tomography (PET CT) scan is a widely used diagnostic method in most malignancies. Recently it also became popular for other diagnoses besides malignancies. In this study, we aimed to evaluate the coronary vessel calcification of the elderly patients who underwent PET CT scan due to malignancies in our clinic. Therefore, we believe that the results of this study might be important to emphasize the value of PET CT in coronary artery disease (CAD).

#### Methods

All patients who underwent PET CT scan due to malignancies between November 2017-August 2018 were retrospectively evaluated. Among them, 100 patients who were over 65 years were included in the study. The thorax CT images of PET CT scans were reevaluated and presence of coronary artery calcifications/aorta calcification were noted. Patient database was scanned to gather informations of CAD history, previous cardiac symptoms and smoking habits. All patients were investigated for cardiac symptoms by phone call. Obtained data were analyzed using SPSS version 20.

#### **Findings**

A total of 100 patients were included in this study; 60 of them were female and the mean age was  $73.01 \pm 7.06$  years (min 65-max 93). 57 patients had coronary calcification, 73 patients had aorta calcification. 13 patients were previously diagnosed with CAD. 61 patients had smoking

history. Cardiac symptoms were detected in 70.5 percent of the smokers and 48.7 percent of the non-smokers (p:0.02). 90 percent of male and 41 percent of female patients had a smoking history (p<0.001). 62 patients had cardiac symptoms and coronary calcification was detected in 69.4 percent of them. Coronary calcification was detected in 36.8 percent of the patients without cardiac symptoms, as well (p:0.001). The most common cardiac symptom was chest pain (50%). 75 percent of the male and 53 percent of the female patients had cardiac symptoms (p:0.02). Cardiac symptoms were determined in 49 patients who had no previous CAD history.

#### Result

In this study, we found out that 57 percent of our elderly patients had calcification in coronary vessels. Presence of coronary vessel calcification might be the only sign of CAD in elderly patients. In PET CT images, coronary calcification was incidentally observed. Although some of the patients who had coronary calcification were aware of their CAD, a plenty of them had no complaints. The indication of coronary calcification on PET CT images might help to increase the awareness of CAD in elderly patients. As a result, early detection of coronary calcification might be an important marker in increasing survival rate and life quality of patients with malignancies.

#### SÖZEL 18

#### A PREANESTHETIC MAJOR PROBLEM: ANEMIA

# Abdullah Özdemir

Recep Tayyip Erdoğan Üniversitesi Tıp Fakültesi, Anesteziyoloji ve Reanimasyon A.D./ Rize

#### **Objective**

Anemia is a major health problem in the world and Turkey. According to the World Health Organization (WHO) criteria, one out of every 3-4 people is estimated to be anemic. Anemia may be common in the preoperative period. The demographic data and diagnoses of the patients, who underwent endoscopy for anemia, were retrospectively reviewed in our study.

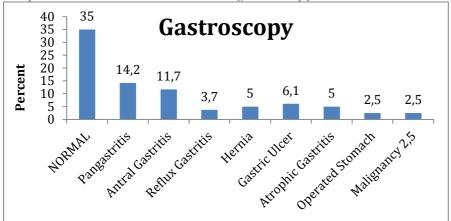
#### Method

The age, gender, etiologic and endoscopic diagnoses of the patients undergone endoscopy (gastroscopy, colonoscopy) under anesthesia due to anemia during the first six months of 2018 were retrospectively reviewed. The patients between 18 and 90 years of age, who underwent endoscopy with the pre-diagnosis of anemia, were included in the study. Pediatric patients, patients with emergency bleeding, and patients undergone endoscopy with different indications were not included in the study.

#### Results

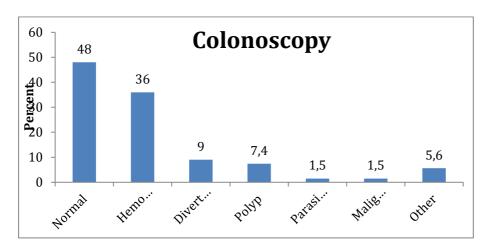
Of the 1641 patients, 162 patients (9.8%/100 females, 62 males) underwent gastroscopy, and of the 956 patients, 134 patients (13.4%/76 females, 58 males) underwent colonoscopy with the diagnosis of anemia. The mean age was 53,2 years (18-90) in gastroscopy cases and was 57,8 years (18-90) in colonoscopy cases. Both procedures were performed together on 96 patients. 100 (62%) of the gastroscopy cases underwent gastroscopy due to iron deficiency anemia; 35% normal, 14.2% pangastritis, 11.7% antral gastritis, 3.7% reflux gastritis, 5% hernia, 6.1% gastric ulcer, 5% atrophic gastritis, 2.5% operated stomach, 2,5% malignancy were detected(Graphic 1).

Graphic 1: Patients who underwent gastroscopy



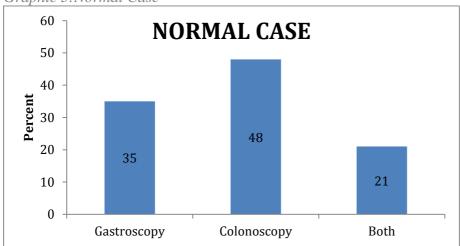
90 (67%) patients underwent colonoscopy due to iron deficiency anemia; 48% normal, 36% hemorrhoid (internal, external), 9% diverticulum, 7.4% polyp, 1.5% parasitosis and 1.5% malignancy were detected (Graphic 2).

Graphic 2: Patients who underwent colonoscopy



Of the 90 patients who underwent both gastroscopy and colonoscopy, 19 patients (21%) were endoscopically normal (Graphic 3).

Graphic 3:Normal Case



#### **Conclusion**

The most common type of anemia in the world and Turkey is iron deficiency anemia. Although the diagnosis can be missed in 30-50% of the cases only with gastroscopy, this rate decreases to 15% when carried out together with colonoscopy. In our study, this rate decreased to 21%. Simultaneous use of lower and upper endoscopic examinations in patients with gastrointestinal loss is important in terms of making a definitive diagnosis. Anemia can also be detected for the first time in patients who will undergo elective surgery and who are admitted to anesthesia outpatient clinics due to preoperative evaluation. An increase may occur in the length of hospital stay, infection risk and cost and mortality rate secondary to preoperatively uncorrected anemia. In fact, elective surgeries should be performed after the anemia treatment is completed to be protected from the negative effects. Anemia is a serious public health problem and should be diagnosed and treated early.

# SÖZEL 19

# PERCUTANEOUS ENDOSCOPIC GASTROSTOMY IN CHILDREN: EVALUATION OF 57 CASES

### Uzm. Dr. Ulaş Emre Akbulut

Department of Pediatric Gastroenterology Hepatology and Nutrition, University of Health Sciences, Antalya Education and Research Hospital, Antalya, Turkey

Aim: Percutaneous endoscopic gastrostomy (PEG) is useful in management of anatomic or functional disorders of upper gastrointestinal system, some neurological, metabolic and oncological diseases. Although PEG association mortality is very low, insertion of PEG may cause some complications. Major and minor complications associated with PEG have been reported 5-17% and 5-50% in the literature respectively. The aim of this study was to evaluate the demographic data and complication rates in children who had undergone PEG in our patients and satisfaction of the families.

Method: All PEG applied patients (n=57) during last five years, in Health sciences University Antalya Education and Research Hospital Paediatric Gastroenterology Clinic aged between 0-18 years included the study. Demographic data of patients, indications for PEG, complications associated with PEG and satisfaction of families were investigated retrospectively from hospital records.

**Results:** 29 (50,9%) of the patients were female. Mean age and weight of the patients were 7,56 years (3 month – 17 years) and  $16.45 \pm 10.21$  kg (3-48 kg) respectively. Majority of the patients (64,9%) were with neurological problems. We had observed two major complications. Intraperitoneal leakage of feeding material in one patient (1,7%) and partial intestinal obstruction in another (1,7%) patient. Both the patients had been recovered with symptomatically treatment. We had observed granulation tissue formation in 9 (15,7%) patients and leakage of gastric content from entrance side of the gastrostomy tube in 24 (42,1%) patients as minor complications. During one year follow up, significant increment of mean weight Z score from -2,74 to -1,25 (p<0,01) and mean height Z score from -2,91 to -2,16 (p<0,01) had been observed in 42 patients. All of the families except one (1,7%) had been satisfied from the application of gastrostomy.

Conclusion: These results had been demonstrated, PEG is safe and successful method in long term encouragement of nutrition in patients with feeding difficulties.

Key words: Percutaneous endoscopic gastrostomy, children, nutrition, complication.

#### SÖZEL 20

ASSESSMENT OF CRP/ALBUMIN RATIO ACCORDING TO STAGE FOR PATIENTS DIAGNOSED WITH ALZHEIMER-TYPE DEMENTIA

#### Hülya Olgun YAZAR

Uzm. Dr., Ordu Üniversitesi Eğitim Araştırma Hastanesi, Nöroloji, ORDU

Tamer YAZAR

Uzm.Dr., Ordu Devlet Hastanesi, Nöroloji, ORDU

#### **ABSTRACT**

Aim: Data were collected for identification of serum C-reactive protein (CRP)/albumin ratio according to disease stage of patients with Alzheimer-type dementia (AD) with the aim of determining the possible effects of the role of inflammation and oxidative stress in the etiology and progression of disease stage.

Method: The study was completed with 180 patients with staging according to clinical dementia rating scale (CDR) criteria and 150 healthy individuals in the same age interval as the patients. This retrospective study applied the CDR, mini mental test (MMSE) and geriatric depression rating scale (GDRS) to patients with AD diagnosis based on disorder in more than one cognitive area and the NINCDS-ADRDA (National Institute of Neurological and Communicative Disorders and Stroke-Alzheimer's Disease and Related Disorders Association) diagnostic criteria. Individuals in the control group had the MMSE and GDRS administered. Venous blood samples were taken from patient and control group after 12-14 hours fasting for biochemical study.

**Results:** The serum albumin and lymphocyte levels were low in both females and males in the AD group, while serum CRP level and CRP/albumin ratio were high. When assessed according to disease stage, the CRP/albumin ratio was only found to be significantly high in stage 3 males compared to stage 1 and 2.

Conclusion: Our study supports the hypothesis that CRP/albumin ratio may be associated with AD. For identification of chronic progressive diseases like AD in the initial stages and to take precautions, it is important to assess variations in easily accessible and low-cost parameters like serum CRP/albumin ratio.

In our study, though there was no significant variation in CRP/albumin ratio according to progressive disease stages, this is a limitation of our study and indicates the need to complete more comprehensive and broader population studies.

Key Words: Alzheimer-type dementia, inflammation, CRP/albumin ratio

TIP FAKÜLTESİ ÖĞRENCİLERİNİN AKILCI İLAÇ KULLANIMINA YÖNELİK TUTUM VE DAVRANIŞLARININ DEĞERLENDİRİLMESİ: RİZE İLİ ÖRNEĞİ

# İlknur Esen Yıldız<sup>1</sup>

<sup>1</sup>Recep Tayyip Erdoğan Üniversitesi Tıp Fakültesi Enfeksiyon Hastalıkları Ve Klinik Mikrobiyoloji ABD

#### **ABSTRACT**

Giriş ve Amaç: Bu çalışmada Rize ilindeki tıp fakültesi öğrencilerinin akılcı ilaç kullanımına yönelik tutum ve davranışlarının değerlendirilmesi amaçlanmıştır.

**Yöntem:** Kesitsel nitelikte tasarlanan bu çalışmanın evrenini; Recep Tayyip Erdoğan Üniversitesi 2017-2018 akademik yılı içerisinde tıp fakültesinde öğrenime devam etmekte olan 500 tıp öğrencisi oluşturdu. Araştırmada örneklem seçilmesine gidilmeyerek çalışmaya katılmayı kabul eden 374 öğrenci çalışmanın örneklemini oluşturdu. Veriler araştırmacılar tarafından, yüz yüze görüşme yöntemi ile anket formu kullanılarak elde edildi. Formda sosyo-demografik verileri ve akılcı ilaç kullanımına yönelik tutum ve davranışları sorgulayıcı soruları içermektedir.

Veriler SPSS 23.0 istatistik paket programı ile analiz edilmiş ve verilerin değerlendirilmesinde tanımlayıcı istatistikler kullanılmıştır. Araştırmaya başlamadan önce, araştırmanın yürütüldüğü kurumdan yazılı izin ve Recep Tayip Erdoğan Üniversitesi Girişimsel Olmayan Klinik Araştırmalar Etik Kurulu'ndan onay alınmıştır. Ayrıca, katılımcılara araştırma hakkında bilgi verilerek bireysel bilgilerinin korunacağı belirtilmiş ve gönüllü olanlar araştırmaya dahil edilmiştir.

Bulgular: Çalışmaya katılan öğrencilerin 21,75±2,7yıl yaş ortalaması ile %50'sinin kadın olduğu belirlendi. Öğrencilerin %15,2'sinin düzenli ilaç kullandığı, %86,1'inin herhangi bir kronik rahatsızlığı olmadığı bulundu. Katılımcıların akılcı ilaç kullanımına yönelik tutum ve davranışları sorgulandığında; %78,6'sı tedavi sonrası arta kalan ilaçları gerektiği zaman kullanmak üzere sakladığını, evlerinde %54,5 oranında hiç kullanılmayan ya da yarım kalmış her yıl yaklaşık 5 den fazla ilacın olduğu ve hatta %54,0'ı son kullanma tarihi geçtiği için bu ilaçların atıldığını, %46,5'i ilacı kullanırken hastalığına uygunluğuna dikkat ettiğini, %65,8'i reçetesiz ilaç kullandığını, en fazla %48,1 oranında evde ağrı kesici bulundurduklarını, %72,2'si ilaçlarını genellikle dolap ısısında sakladıklarını, % 47,5'i evdeki ilacı tekrar kullanmak istediğinde daha önce kullandığı için kimseden bilgi almadığını, gerekli olabileceği düşüncesi ile %36,3'ü ağrı kesici ilaç reçete ettirdiğini belirtti.

Öğrencilik herhangi bir hastalık durumundaki akılcı ilaç kullanımına yönelik tutum ve davranışları sorgulandığında; herhangi bir rahatsızlık durumunda %66,9'u hekime başvurduğunu, %54,8'i hekimin önerdiği süre ilacını kullandığını, %74,7'si grip, nezle ve soğuk algınlığı durumunda muayene olmadan antibiyotik kullanmadığını belirtti.

Akılcı ilaç kullanımına yönelik bilgi düzeyi; %74,6'sı akılcı ilaç konusunda bilgi aldığını, bilgiyi %66.6'sının derslerden aldıkları, %53.2'si ilacın prospektüsünden ilacın yan etkilerine dair bilgileri öğrendiği, %84.5'i yan etki gelişmesi durumunda hekime başvurdukları, sağlık problemi nedeniyle kullandıkları ilaca yönelik %48.9'u kullanım amacını, %46.5'i uygulama şeklini,%40.1'i ilaca ait uyarılar ve önlemleri, %32.9'u özel durumları iyi bildiğini, %37.2'si yan etkilerini ve %38.2'si ilaç etkileşimini orta düzeyde bildiğini düşündükleri bulundu.

**Tartışma ve Sonuç:** Çalışmamızda tıp öğrencilerinde akılcı ilaç kullanımı ve tutumlarının yeterli olmadığu görüldü. Bu nedenle eğitimlerin planlanarak farkındalığın artırılması gerektiği düşüncesindeyiz.

Anahtar Kelimeler: Tıp öğrencisi, Akılcı ilaç

#### SÖZEL 22

ACUTE INFERIOR MYOCARDIAL INFARCTION AFTER MULTIPLE BEE STING: A RARE REPORT OF KOUNIS SYNDROME

Eftal Murat Bakirci<sup>1</sup>, <u>Hakan Duman<sup>2</sup></u>

Objective: Kounis syndrome is the concurrence of acute coronary syndromes with conditions associated with mast cell activation including allergic or hypersensitivity reactions besides anaphylactic or anaphylactoid reactions. Possible pathogenetic mechanisms include severe hypotension, rarely hypertension and coronary vasospasm with subsequent thrombosis of coronary vessels developed after the release of vasoactive, inflammatory and thrombogenic substances contained in the bee venom. We report a case of acute inferior myocardial infarction following multiple bee stings.

Methods: A 42 year-old-man was admitted to our hospital with generalized pruritis, erythema, chest pain, vomiting and excessive sweating within 3 h after being stung by many honeybees and hospitalized with diagnosis of acute inferior myocardial infarction (Figure 1). Past medical and surgical history was insignificant. Initial physical examination revealed blood pressure of 120/80mmHg, respiratory rate of 22/min, and a pulse rate of 70/min. There were multiple bee sting marks, and a mild erythematous rash and swelling of the face and lips. On auscultation, heart sounds and respiratory sounds were normal. The electrocardiogram showed marked ST segment elevation in the inferior leads. Blood tests revealed elevated levels of troponine I (1.25 ng/mL) and elevated serum IgE: values (225 IU/ml). A two-dimensional echocardiogram showed inferior wall hypokinesis. The patient was submitted to catheterization laboratory for percutaneous coronary intervention. Coronary angiogram was completely normal.

**Results:** The patient was diagnosed as type 1 variant of Kounis syndrome. He was treated with prednisolone and diphenhydramine. The case had uncomplicated hospital follow-up and was discharged uneventfully on 6th day after admission.

Conclusions: Envenomation caused by honeybees may cause acute inferior myocardial infarction and these reversible changes may be due to local vasoactive, anaphylactic and cardiotoxic effects of honeybee stings. Kounis syndrome has three variants: type 1 variant describes patients with normal or near normal coronary arteries without risk factors for coronary artery disease. Type II variant includes patients with culprit but quiescent pre-existing coronary disease. Type 3 variant is seen in patients with stent thrombosis. Detailed history and careful physical examination are essential in the diagnosis.

<sup>&</sup>lt;sup>1</sup>Department of Cardiology, Faculty of Medicine, Erzincan Binali Yildirim University, Erzincan, Turkey

<sup>&</sup>lt;sup>2</sup>Department of Cardiology, Faculty of Medicine, Recep Tayyip Erdoğan University, Rize, Turkey.

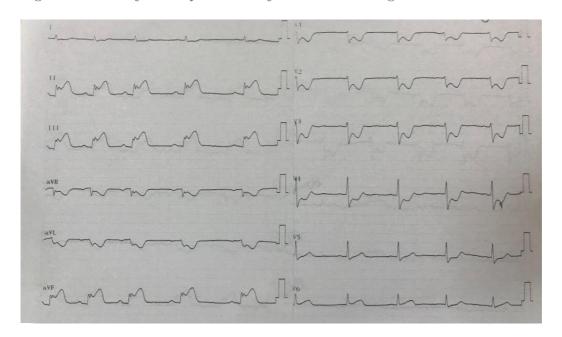


Figure 1 Acute inferior myocardial infarction ECG image

# EFFICACY OF RED CELL DISTRIBUTION WIDTH AND PLATELETCRIT AS PREDICTORS OF SUBCLINICAL INFLAMMATION IN OBESITY Fatih KUZU<sup>1</sup>

1- Dumlupınar University, Evliya Çelebi Training and Research Hospital, Department of Endocrinology and Metabolism, Kütahya, Turkey

**Background:** Complications such as type 2 diabetes mellitus, metabolic syndrome, and cardiovascular disease are frequently encountered in obesity. Proinflammatory cytokines released from adipose tissue form a basis for these complications by leading to insulin resistance. Instead of high-cost proinflammatory cytokines, the use of some simple hematological parameters recommended as the predictors of inflammation has gained currency. The present study aimed to investigate the relationship of the hematological predictors of inflammation in complete blood count with body mass index (BMI) and homeostatic model assessment for insulin resistance (HOMA-IR) values.

**Methods:** The study included 354 subjects, who were admitted to the endocrinology outpatient clinic between January 2016 and March 2018. According to their BMI values, the subjects were divided into five groups as class III obesity, class II obesity, class I obesity, overweight, and normoweight. In addition, the subjects were divided into two groups as HOMA-IR < 2.7 and  $HOMA-IR \ge 2.7$  to evaluate insulin resistance. As the predictors of subclinical inflammation, the mean platelet volume (MPV), platelet distribution width (PDW), plateletcrit (PCT), red cell

distribution width (RDW), neutrophil-lymphocyte ratio (NLR), and platelet-lymphocyte ratio (PLR) were compared among the study groups. The study protocol was approved by the Institutional Ethics Committee of Dumlupinar University.

**Results:** There were statistically significant differences among the BMI groups in terms of WBC, neutrophil count, lymphocyte count, RDW, platelet count, and PCT values (p<0.001 for each). Hemoglobin, WBC, neutrophil count, lymphocyte count, RDW, platelet count, and PCT value were significantly higher in those having HOMA-IR value of  $\geq$ 2.7 (p=0.02, p<0.001, p=0.001, p<0.001, p=0.003, p<0.001 and p<0.001, respectively). According to the Pearson's correlation analysis, RDW and PCT values showed strong positive correlation with both HOMA-IR and BMI. Multivariate linear regression analysis revealed significant correlations of BMI with RDW and PCT values, whereas HOMA-IR showed a correlation only with PCT value.

**Conclusion:** RDW and PCT are simple and low-cost markers that are able to predict the development of cardiovascular complications and other comorbidities in overweight and obese subjects.

**Key Words:** Obesity, homeostatic model assessment for insulin resistance, subclinical inflammation, red cell distribution width, plateletcrit

**Table 1.** Demographic, clinical and laboratory characteristics of study participants

| Variables              | Normowei ght (n=74)                 | Overweig ht (n=77) | Class I obesity (n=77)   | Class II obesity (n=63) | Class III obesity (n=63) | p          |
|------------------------|-------------------------------------|--------------------|--------------------------|-------------------------|--------------------------|------------|
| Female/male            | 48/26                               | 47/30              | 54/23                    | 47/16                   | 46/17                    | 0.37       |
| Smoker/nonsmok<br>er   | 14/60                               | 16/61              | 11/66                    | 11/52                   | 10/53                    | 0.51       |
| Age, year              | 35.3±11.2                           | $37.1 \pm 10.8$    | <i>36.6</i> ± <i>9.7</i> | $38.5 \pm 10.8$         | 39.5±11.3                | 0.16       |
| $BMI, kg/m^2$          | 21.9±2.2                            | 27.3±1.3           | 32.3±1.4                 | 37.3±1.4                | 44.4±4                   | <0.00<br>1 |
| Insulin, uIU/mL        | 6.6±3.4                             | 9.0±5.4            | 12.4±5.8                 | 13.5±8.4                | 14.5±7.1                 | <0.00<br>1 |
| Glucose, mg/dL         | 91.7±6.7                            | 93.7±7.9           | 92.8±8.0                 | 96.1±9.6                | 96.2±9.8                 | 0.005      |
| HOMA-IR                | 1.49±0.84                           | 2.09±1.37          | 2.84±1.52                | 3.20±2.08               | 3.43±1.77                | <0.00<br>1 |
| HbA1c (%)              | 5.28±0.34                           | 5.24±0.34          | 5.33±0.32                | 5.52±0.35               | 5.58±0.35                | <0.00<br>1 |
| LDL-C, mg/dL           | <i>105.8</i> ± <i>29. 3</i>         | 120.5±33.<br>5     | 113.1±27.4               | 117.6±26.6              | 115.4±30.3               | 0.05       |
| HDL-C, mg/dL           | 54.7±11.0                           | 46.8±10.8          | 47.4±11.1                | 46.8±9.5                | 47.4±10.5                | <0.00<br>1 |
| TC, mg/dL              | <i>178.7</i> ± <i>34</i> . <i>3</i> | 197.2±37.<br>5     | 186.6±33.4               | 195.8±35.2              | 192.4±33.9               | 0.14       |
| Triglyceride,<br>mg/dL | 91.1±38.6                           | 147.1±79.          | 133.3±68.7               | 159.9±96.0              | 145.1±62.7               | <0.00<br>1 |

BMI: Body mass index; HOMA-IR: Homeostatic Model of Assessment-Insulin Resistance; HbA1c: Hemoglobin A1c; LDL-C: Low-density lipoprotein cholesterol; HDL-C: High-density lipoprotein cholesterol; TC: Total cholesterol

Data are presented as n/n or mean±standard deviation, where appropriate.

P values were calculated by ANOVA F-test.

Table 2. Comparison of the hematological parameters in the groups

|                       | Normowei                    | Overweig        | Class I         | Class II        | Class III       |         |
|-----------------------|-----------------------------|-----------------|-----------------|-----------------|-----------------|---------|
| Variables             | ght                         | ht              | obesity         | obesity         | obesity         | p       |
|                       | (n=74)                      | (n=77)          | (n=77)          | (n=63)          | (n=63)          |         |
| Hb, g/dL              | $14.3 \pm 1.4$              | 14.5±1.3        | 13.9±1.4        | $13.7 \pm 1.3$  | $13.5 \pm 0.9$  | < 0.001 |
| $WBC, 10^3/mm^3$      | $6.83 \pm 1.33$             | $7.29 \pm 1.54$ | $7.42 \pm 1.57$ | $8.03 \pm 1.57$ | $8.48{\pm}1.89$ | < 0.001 |
| $NEUT$ , $10^3/mm^3$  | 3.87±1.01                   | $4.13\pm1.10$   | $4.29{\pm}1.23$ | $4.57 \pm 1.04$ | $4.93{\pm}1.39$ | < 0.001 |
| $LYMPH$ , $10^3/mm^3$ | 2.23±0.66                   | 2.52±0.67       | 2.43±0.56       | 2.68±0.70       | 2.82±0.88       | < 0.001 |
| $MON, 10^{3}/mm^{3}$  | $0.44 \pm 0.13$             | $0.46 \pm 0.12$ | $0.43 \pm 0.12$ | $0.46 \pm 0.14$ | $0.49 \pm 0.11$ | 0.09    |
| RDW, %                | 13.38±0.9<br>2              | 13.43±1.0<br>0  | 13.70±1.1<br>6  | 13.77±1.08      | 14.13±1.23      | < 0.001 |
| PLT, $10^3/mm^3$      | <i>245.5</i> ± <i>45. 4</i> | 265.8±53.       | 273.8±55.       | 284.7±56.5      | 286.7±56.1      | < 0.001 |
| MPV, $fL$             | $9.6 \pm 1.06$              | $9.7 \pm 1.06$  | 9.6±1.02        | $9.5 \pm 1.28$  | $9.8 \pm 1.10$  | 0.74    |
| PDW, fL               | 16.09±0.5<br>0              | 16.13±0.3<br>9  | 16.03±0.4<br>6  | 15.82±1.35      | 15.75±2.04      | 0.17    |
| PCT, %                | 0.233±0.0<br>3              | 0.255±0.0<br>4  | 0.262±0.0<br>4  | 0.268±0.04      | 0.279±0.05      | < 0.001 |
| NLR                   | $1.83 \pm 0.67$             | $1.72 \pm 0.55$ | $1.82 \pm 0.60$ | $1.78 \pm 0.54$ | $1.86 \pm 0.67$ | 0.66    |
| PLR                   | 117.02±39<br>.6             | 111.37±33<br>.1 | 118.45±37<br>.0 | 112.51±35.      | 109.49±36.      | 0.54    |

Hb: Hemoglobin; WBC: White Blood Cells; NEUT: Neutrophils; LYMPH: Lymphocytes; MON: Monocyte, RDW: Red Cell Distribution; PLT: Platelets; MPV: Mean Platelet Volume; PDW: Platelet Distribution Width; PCT: Plateletcrit; NLR: Neutrophil Lymphocyte Ratio; PLR: Platelet Lymphocyte Ratio

Data are presented as mean±standard deviation.

P values were calculated by ANOVA F-test.

*Table 3.* Comparison of the hematological parameters in the HOMA-IR <2.7 and HOMA-IR ≥2.7 groups

| Variables            | HOMA-IR          | <2.7 HOMA-IR     | ≥2.7    |
|----------------------|------------------|------------------|---------|
| variables            | (n=208)          | (n=146)          | $\rho$  |
| Hb, g/dL             | $14.2 \pm 1.43$  | 13.8±1.29        | 0.02    |
| $WBC, 10^{3}/mm^{3}$ | $7.2 \pm 1.59$   | $8.0 \pm 1.66$   | < 0.001 |
| $NEUT$ , $10^3/mm^3$ | $4.15{\pm}1.18$  | $4.60 \pm 1.20$  | 0.001   |
| $LYMPH, 10^3/mm^3$   | $2.37 \pm 0.66$  | $2.73 \pm 0.75$  | < 0.001 |
| $MON, 10^{3}/mm^{3}$ | $0.45 \pm 0.13$  | $0.46 \pm 0.11$  | 0.21    |
| RDW, %               | $13.5 \pm 0.9$   | $13.8{\pm}1.2$   | 0.003   |
| $PLT, 10^{3}/mm^{3}$ | 258.8±48.1       | $287.1 \pm 60.6$ | < 0.001 |
| MPV, $fL$            | $9.7 \pm 1.14$   | $9.6 \pm 1.05$   | 0.36    |
| PDW, $fL$            | $16.05 \pm 0.84$ | $15.87 \pm 1.39$ | 0.12    |
| PCT, %               | $0.249 \pm 0.04$ | $0.272 \pm 0.05$ | < 0.001 |
| NLR                  | $1.83 \pm 0.63$  | $1.76 \pm 0.57$  | 0.29    |
| PLR                  | $115.6 \pm 36.2$ | 111.5±36.8       | 0.30    |

Hb: Hemoglobin; WBC: White Blood Cells; NEUT: Neutrophils; LYMPH: Lymphocytes; MON: Monocyte, RDW: Red Cell Distribution; PLT: Platelets; MPV: Mean Platelet Volume; PDW: Platelet Distribution Width; PCT: Plateletcrit; NLR: Neutrophil Lymphocyte Ratio; PLR: Platelet Lymphocyte Ratio

Data are presented as mean±standard deviation.

*P values were calculated by student t-test.* 

**Table 4.** Pearson's correlation analysis between hematological parameters and body mass index and homeostasis model of insulin resistance

| Variables | RDW   | RDW     |       |         |  |
|-----------|-------|---------|-------|---------|--|
|           | r     | p       | r     | p       |  |
| BMI       | 0.275 | < 0.001 | 0.301 | < 0.001 |  |
| HOMA-IR   | 0.157 | 0.003   | 0.224 | < 0.001 |  |

BMI: Body mass index; HOMA-IR: Homeostatic Model Assessment for Insulin Resistance; RDW: Red Cell Distribution; PCT: Plateletcrit.

**Table 5**. Multivariate linear regression analysis of variable influencing plateletcrit and red cell distribution in the groups

|         | 0 1   |       |                          |         |
|---------|-------|-------|--------------------------|---------|
|         | $R^2$ | β     | 95 % Confidence Interval | p       |
| PCT     |       |       |                          |         |
| BMI     | 0.100 | 0.317 | 0.01-0.02                | < 0.001 |
| HOMA-IR | 0.111 | 0.116 | 0.001-0.006              | 0.04    |
| RDW     |       |       |                          |         |
| BMI     | 0.066 | 0.256 | 0.02-0.04                | < 0.001 |

BMI: Body mass index; HOMA-IR: Homeostatic Model Assessment for Insulin Resistance; RDW: Red Cell Distribution; PCT: Plateletcrit.

#### SÖZEL 24

#### RETINOCHOROIDAL EVALUATION IN IRON DEFICIENCY ANEMIA

#### Refika Hande Karakahya

Dr Öğretim Üyesi, S.B. Ordu Üniversitesi Eğitim ve Araştırma Hastanesi, Göz Hastalıkları A.D., ORDU

**Purpose:** The evaluation of the retina and choroid in patients with iron deficiency anemia (IDA) via spectral domain optical coherence tomography (SD-OCT).

Materials and Methods: Fifty-eight female patients diagnosed with IDA (IDA group) and 50 age and sex-matched healthy controls (HC) were enrolled in this retrospective, comparable study. All patients underwent a complete ophthalmic examination including SD-OCT for measurements of retinal nerve fiber layer (RNFL) thicknesses in average and in quadrants, ganglion cell complex and interplexiform layer (GC-IPL) thickness in sectors and subfoveal choroidal thickness (SCT). Only the right eyes of the participants were selected for evaluation. Serum haemoglobin (Hb), iron, ferritin and transferrin concentrations, total iron-binding capacity (TIBC) were determined and correlated with SD-OCT parameters

**Results:** The average, inferior and nasal quadrant RNFL thickness in the IDA group were significantly thinner than the HC group (p = 0.001, p = 0.037, p = 0.032). GC-IPL thickness in the inferior and inferonasal sectors was significantly thinner in IDA group than HC group (p = 0.01, p = 0.001). SCT was found to be significantly thinner in IDA group than the HC group (p = 0.001). Average RNFL thickness was significantly correlated with hemoglobin (r = 0.142), iron (r = 0.174), ferritin (r = 0.121), transferrin saturations (r = 0.145), whereas inversely correlated with TIBC (r = -0.129).

Conclusions: IDA exhibited a thinner retina, especially involving the inner layers, pointing out a possible hypoxic neuronal and axonal disturbance. Choroidal thinning, revealing presumed deterioration of ocular blood flow in IDA, may represent an early sign for vasoocclusive events in the absence of atherosclerosis.

#### SÖZEL 25

THE DETERMINATION OF HEALTH STATUS AND NEEDS OF STUDENTS AND STAFFS IN THE ERZINCAN UNIVERSITY YALNIZBAG CAMPUS

<u>Selçuk Akturan<sup>1</sup></u>, Sevim Aksoy Kartçı<sup>2</sup>, Bilge Tuncel<sup>1</sup>, Canan Tuz<sup>3</sup>, M. Çiğdem Apaydın Kaya<sup>4</sup>

- 1- Karadeniz Technical University, Faculty of Medicine, Department of Medical Education
- 2- Erzincan Üzümlü State Hospital
- 3- Erzincan Binali Yıldırım University, Faculty of Medicine, Department of Family Medicine
- 4- Marmara University, Faculty of Medicine, Department of Family Medicine

#### Aim

The determination of health status and needs in health care delivery is important in terms of determining the content, priorities and quality of health care. Assessing the health needs of the community will help to allocate resources and improve health care delivery system. One of the primary care centers in our country is the 'Medico-Social Center' (MSC) or 'Health Guidance Center' in the universities. The main duties of these units are to provide preventive measures for the health and wellness of people before they get sickness, to provide education and counseling services. Knowing the health status of university students and their staff will contribute to the development of health outcomes. The aim of the research is to investigate the health status and needs of the students and staff who are studying at the Erzincan University Yalnizbag Campus and propose solutions.

#### Methods

It is a cross-sectional study. Erzincan University created the universe of researching students and staff (academic, administrative, service work) at the Erzincan University Yalnizbag Campus between December 1, 2016 and December 1, 2017. A proportionate stratified sampling method was used to achieve sampling. A questionnaire involved the sociodemographic characteristics of the participants and questions such as the individual's current illnesses, medications, the number of doctor visits, previous primary care experience, level of satisfaction, problems encountered, preventive health care purchase status, healthy lifestyle behaviors, was applied to participants. SPSS 23 program was used in the evaluation of the data and p < 0.05 value was accepted as statistically significant.

#### Results

About 36% of students with known diagnoses were in university campus, and about half of them were on using regular medication for their illness. In the last year, the average of doctor visits for any reason was 2.25. During primary care visits, 69% of the students stated that they had problems, and 68% of those who suffered complained of disinterest and untrained behavior.

Additionally,15% of the students stated that they have had periodic health examination before. 65% of the students reported that they would register if primary care center is opened on campus. Expectations from primary care center in the campus were; emergency intervention, general control, nutrition counseling, exercise counseling, sleep disorders regulation, psychological counseling, health report, mouth and teeth health care.

#### Conclusion

It can be emphasized that the opening of a unit that provides primary health care at the university campus can meet the health demands and needs.

#### SÖZEL 26

INCREASING THE AWARENESS OF LUNG HEALTH BY SPIROMETRY: CHANGE 'WORLD DAYS' TO AN ADVANTAGE!

Bilge Yılmaz Kara<sup>1</sup>, Dilek Karadoğan<sup>1</sup>

<sup>1</sup>Department of Pulmonology, Recep Tayyip Erdoğan University, Rize, Turkey

### Objective:

The importance of world days is well established and each year several activities are being organized worldwide on world days. 'World COPD day', 'World asthma day', 'World smoking cassation day' are very important for public lung health for calling attention to the most common lung diseases. In this study we aimed to evaluate the respiratory symptoms and pulmonary function test results of individuals who were interested in performing spirometry on world days associated with lung health.

Method: The study was carried out on World COPD day (November 2017), World asthma day (May 2018), World smoking cessation day (February 2018) at the entrance hall of a tertiary care hospital located in the Eastern Black Sea region of Turkey. Individuals over 40 years old who were visiting the hospital in those days were invited to participate the study. After signing the written informed consent, participants underwent a questionnaire regarding their demographical, clinical characteristics, afterwards they performed conventional spirometry test in companion with a crew of medical faculty students who were trained by a pulmonologist. The data obtained were evaluated statistically by using SPSS version 22.

#### Results:

A total of 345 patients participated in the study. Patients' mean age was  $55.9\pm10$  with male predominance (58.2%). Of these, 66.1% reported one or more comorbid diseases, 29.3% had a positive family history of pulmonary diseases, 3.2% had previous COPD diagnosis, 11% already had asthma diagnosis.

According to smoking status; 35.6% of them was current smokers, 33.6% was former smokers, 30.7% was never smokers. Current smoking percentage was 40.2% for males and 29.1% for females. Among current smokers 30.4% had an earlier intention to quit and only 7% had applied to a smoking cessation clinic. Most common symptoms were fatigue (53.6%), dyspnea (42.6%) and cough (42.3%). Regarding the spirometry test results; 68.9% had normal lung volumes, 22.8% had restrictive pattern, 8.1% had obstructive pattern.

Evaluation of the demographic data showed that male gender and younger age were associated with current smoking (p<0.001). Presence of cough, sputum expectoration or wheezing rates were higher in current smokers (p<0.001). Age, tuberculosis history, COPD history, smoking

duration, smoking intensity, presence of fatigue, dyspnea and cough were all positively corelated with pathologic PFT results (p<0.001).

**Conclusion:** This study showed that; older age, longer smoking history and presence of respiratory symptoms were the strongest determinants of impaired lung functions. Therefore, particularly in primary care setting, patients with such features should be examined periodically with spirometry.

#### SÖZEL 27

#### A CASE OF SARCOIDOSIS WITH SKIN INVOLVEMENT

Göknur Özaydın Yavuz, <u>İbrahim Halil Yavuz</u> Yüzüncü Yıl Üniversitesi Tıp Fakültesi Dermatoloji Anabilim Dalı, Van

Introduction: Sarcoidosis is a systemic granulomatous disease of unknown etiology that is characterized by non-caseating granulomas. Approximately 20 to 30% of patients with systemic sarcoidosis have skin lesions of various morphology, leading to the designation "great imitator". Sarcoidosis is frequently triggered by infectious agents, and occasionally another antigenic stimulus may be identified in individuals with genetic predisposition. Herein, we describe a patient presenting with cutaneous signs who was eventually diagnosed as having sarcoidosis after histopathological examination.

Case: A 35-year old male patient presented to our outpatient unit with complaints of mildly pruritic reddish skin lesions of the face and scalp. In his dermatological examination showed elevated erythematous annular plaques, the greatest being 5-6 cm, in periorbital area, temporal area, left dorsolateral aspect of the nose, and in the cheek. There were multiple mobile unpainful lymph nodes, approximately 1.5 to 2 cm in diameter, were present in the cervical and pre-auricular regions. An excisional biopsy for the cervical lymphadenopathy was performed, which showed non-caseating granulomatous changes. Although the patient was referred to the department of pulmonary disease for further management, methylprednisolone aceponate pomade was given.

Discussion: First described by an English dermatologist in 1877 as "livid papillary psoriasis", sarcoidosis represents a systemic granulomatous disorder. Lung involvement may occur in 90 to 95 of the cases. Peripheral lymph nodes may be palpated in 10 to 15% of the patients. Skin lesions of sarcoidosis are classified as specific or non-specific based on the presence or absence of nan-caseating granulomas. Laboratory tests may show hypercalcemia, hypercalciuria, and ACE elevation, more likely in acute sarcoidosis.

Conclusion: The aim of treatment in sarcoidosis is to achieve symptomatic relief, improvement in objective test results indicative of disease activity, and to prevent chronic disability caused by disease progression



THE KNOWLEDGE LEVELS OF EMERGENCY PHYSICIANS ON CHILD ABUSE; A PRELIMINARY STUDY

Ali AYGÜN<sup>1</sup>, Hacer Yasar TEKE<sup>2</sup>, Abdullah Kaan KURT<sup>3</sup>

- 1. Assistant Professor, M.D., Ordu University, Faculty of Medicine, Department of Emergency Medicine, Ordu, TURKEY
- 2. Assistant Professor, M.D., Ordu University, Faculty of Medicine, Department of Forensic Medicine, Ordu, TURKEY
- 3. Research Assistant, M.D., Karadeniz Technical University, Faculty of Medicine, Department of Family Medicine, Trabzon, TURKEY

**Introduction**: In our country, child abuse is a current problem with ongoing efforts to find a solution. The aim of this study is to investigate the interest and knowledge levels of emergency service doctors in this subject.

Material And Method: Male and female doctors working in emergency services of Ordu State Hospital and Ordu Training and Research Hospital and willing to participate in the study were included in the study. A preliminary questionnaire with 28 questions and the "Child Abuse Knowledge Scale" developed and validated by Kara and colleagues consisting of 25 items were applied to doctors working in the abovementioned hospitals.

As regards the inter-group comparisons, comparison was carried out using the Mann-Whitney U when the number of independent groups was two and using the Kruskal Wallis test when the same number was more than two. Statistical significance level was accepted as p < 0.05.

**Results:** Thirty doctors were included in our study, out of which 17 were females and 13 were males. Seventy percent (n=21) of doctors declared that the legal sanctions against sexual abuse were too light. The total mean knowledge scores of specialists on child abuse and neglect was  $20.00 \pm 3.92$ , while the same for general practitioners was  $20.94 \pm 3.67$ . Furthermore, the total mean knowledge score of female doctors was  $21.41 \pm 3.48$  and slightly higher than the total mean knowledge scores of males, which was  $19.53 \pm 3.90$ .

**Conclusion:** Increasing the on-the-job trainings about child abuse will help doctors to better evaluate the findings indicating abuse.

# SÖZEL 29

RELATION OF PLATELET/NEUTROPHIL AND NEUTROPHIL/LYMPHOCYTE RATIO WITH PLUS DISEASE IN PATIENTS WITH RETINOPATHY OF PREMATURITY

Emrullah Beyazyıldız<sup>1</sup>, Özlem Beyazyıldız<sup>1</sup>, Didem Yeşilırmak<sup>2</sup>
1.Sağlık Bilimleri Üniversitesi, Samsun Eğitim ve Araştırma Hastanesi, Göz Kliniği, Samsun
2. Özel Medikalpark Hastanesi, Yenidoğan Kliniği, Samsun

Aim: To find any relation of platelet/neutrophil and neutrophil/lymphocyte ratio with plus disease in patients with retinopathy of prematurity

Method: 146 eyes of 73 patients from a single private hospital in Samsun Education and Research Hospital who had ROP diagnosis were included in this retrospective study. 50 eyes of 25 patients with Type 1 ROP diagnosed and treated were classified as Group 1, and 96 eyes of 48 patients without treatment were classified as Group 2. Hemogram tests of the patients performed between the 33th and 37th of the post-gestational week were examined and platelet / lymphocyte and neutrophil / lymphocyte ratios with inflammation markers were screened. Patients were also assessed for the presence of the disease, the week of birth, the weight of the birth, and accompanying diseases.

**Results:** The mean platelet / lymphocyte ratio was  $48.9 \pm 25.8$  in group 1 cases and  $70.3 \pm 36.08$  in group 2 cases. Platelet / lymphocyte ratio was significantly lower in Group 1 cases (p <0.001). The mean neutrophil / lymphocyte ratio of the cases was  $0.64 \pm 0.54$  in group 1 and  $0.88 \pm 1.25$  in group 2. Neutrophil/ lymphocyte ratio was significantly lower in Group 1 cases (p <0.001). The mean birth weight of the cases was  $831 \pm 220$  gr in group 1 and  $1241 \pm 320$  gr. in group 2. The mean birth week was  $26 \pm 2.19$  in group 1 and  $30 \pm 3.0$  in group 2. Mean birth week and birth weight were significantly lower in Group 1 (p <0.001).

Conclusion: Platelet / lymphocyte and neutrophil / lymphocyte ratios were found to be lower in cases with type 1 ROP with plus disease. ROP cases with low values of this indices should be followed closely in terms of disease development and treatment needs.

# SÖZEL 30

# RELATIONSHIP BETWEEN ANAEMIA DURING PREGNANCY AND PRETERM DELIVERY

Cüneyt Ardıç<sup>1</sup>, <u>Oğuzer Usta<sup>1</sup></u>, Esma Omar<sup>1</sup>, Cihangir Yıldız<sup>1</sup>, Erdem Memis<sup>1</sup>, Güzin Zeren Öztürk<sup>2</sup>

<sup>1</sup> Recep Tayyip Erdoğan University Faculty of Medicine Department of Family Medicine.

#### **Objective**

Preterm delivery, which is the most common cause of neonatal deaths and the second most common cause of death in children aged <5 years, is defined as birth before 37 weeks of pregnancy. The rate of preterm delivery worldwide ranges from 5% to 18%, and this rate has gradually increased in recent years.

In this study, we evaluated the relationship between preterm delivery and the average Hb levels of pregnant women who attended at least four pregnancy follow-up visits at family health centres and in whom Hb levels were measured in the first and second trimesters of pregnancy. Our objective in this study, which is the first study to evaluate the relationship between Hb levels and preterm delivery in Turkey, was to examine the relationship between preterm delivery and maternal anaemia.

#### Material and Methods

This retrospective cohort study was conducted in eight different family health centres located in the provinces of Rize and Istanbul between 1 December 2017 and 1 March 2017. The study included a total of 483 women; 294 of them had normal delivery and 189 had preterm delivery. All mothers participating in the study had attended at least three pregnancy follow-up visits with their family physician (at least one visit in each trimester) as per the pregnancy follow-up

<sup>&</sup>lt;sup>2</sup> Sisli Hamidiye Etfal Training and Research Hospital, Family Physicians.

protocol set out by the Ministry of Health. Hb values of all the women participating in the study were measured in the first and second trimesters, and the average Hb values were calculated.

#### Results

The mean Hb level during pregnancy was  $10.89 \pm 0.85$  mg/dl in women who delivered preterm babies; 68.8% (n = 130) of these women had anaemia. The mean Hb level during pregnancy was  $11.66 \pm 0.85$  mg/dl in control women who delivered full-term babies; 76.19% (n = 224) of these women were non-anaemic. There was a significant difference between both groups (p < 0.001). The mean age of the mothers delivering preterm babies was  $30.56 \pm 5.84$  years, and this was lower than that in the control group ( $32,23\pm5,89$ ) (p < 0.05)

#### **Conclusions**

Anaemia during pregnancy might be related with preterm delivery and this must be corrected. Pregnant women should undergo more stringent follow-up programmes.

#### SÖZEL 31

DETERMINING PREVALENCE OF VITAMIN D DEFICIENCY AND INSUFFICIENCY AMONG HEALTHY CHILDREN IN ISTANBUL

Dr Yusuf Elgörmüş

İstanbul Medicine Hospital Çocuk Hastalıkları Kliniği

**OBJECTIVES:** Vitamin D deficiency and insufficiency is known widespread and it is proved that decreasing level of vitamin D can cause several health problems. It is generally approved as vitamin D deficiency if serum 25-hydroxyvitamin D [25(OH)D] levels less than 20 ng/mL; as Vitamin D insufficiency if it is between 21-30 ng/mL and as normal vitamin D levels if 25(OH)D more than 30 ng/mL.

**METHODS:** The study includes 244 people (between age 5-15) with general health screened and without any compliants between 2015-2018. After excluding patients who uses medication that can affect 25 (OH) D levels (vitamin tablets etc.) and who has any health problems, it is determined the deficiency and insufficiency of remaining 244 people retrospectively via checking from database.

**RESULTS:** Of the 244 individuals, 132 (54.1) were male and 112 (41.81%) were female. Serum 25 (OH) D mean was 17.3  $\pm$  9.2 ng / mL. Serum 25 (OH)D levels in male and female gender groups were values respectively 17.65  $\pm$  9.0; 16.8  $\pm$  9.3. 149 (61.1%) individuals had 25 (OH) D deficiency and 57 (23.4%) had 25 (OH) D insufficiency. (Table 1).

**CONCLUSION:** Vitamin D deficiency is common in our country. In our study, vitamin D deficiency was observed in 61.1% of healthy subjects and insufficiency in 23.4%. Because Vitamin D deficiency and insufficiency are very prevalent, exposure to sunlight, vitamin D-enriched foods or vitamin D support can be vital for treating deficiency and insufficiency

#### References:

1) Solak I, et al. Evaluation of 25-Hydroxyvitamin D Levels in Central Anatolia, Turkey. Biomed Res Int. 2018 Jun 25;2018:4076548.

Table 1: Vitamin D levels in healthy children

|                                | Male            | Female         | p     |
|--------------------------------|-----------------|----------------|-------|
|                                | n = 132(%)      | n=112          |       |
|                                | 54.09)          | (%45.91)       |       |
| $25(OH)D$ $ng/mL$ , $mean \pm$ | $17.65 \pm 9.0$ | $16.8 \pm 9.3$ | 0.830 |
| standard deviation             |                 |                |       |
| Vitamin D deficiency, n (%)    | 79 (%59,8)      | 70 (%62,5)     | 0.770 |
| Vitamin D insufficiency, n     | 32 (%24,24)     | 25 (%22,32)    | 0.839 |
| (%)                            |                 |                |       |

NABOTHIAN CYST HEMATOMA AND HEMATOCOLPOS SECONDARY TO NABOTHIAN CYST HEMATOMA: A QUITE RARE CASE

#### NABOTHIAN CYST

Pervin Karlı<sup>1</sup>, Beril Gürlek<sup>2</sup>

- 1. Department of Obstetrics and Gynecology, Amasya University Research Hospital, Amasya, Turkey.
- 2. Department of Obstetrics and Gynecology, Recep Tayyip Erdoğan University, Rize ,Turkey

Corresponding Author: Pervin Karlı, MD, Ph, Associate Prof, Department of Obstetrics and Gynecology, Amasya University Research Hospital, 05000 Amasya, Turkey

#### Abstract:

The cervical canal is coated with nabothian glands. The openings of these glands to outside are covered and clogged with an ordinary cell layer. Due to this change, the secretion of naboth glands cannot flow out of the body and the gland begins to swell gradually. As the secretion accumulates, the gland starts expanding and forming a small cystic structure on the cervix. In our case, a 49-year-old female patient was admitted to our clinic with the complaints of no menstruation for 2 months and groin pain. The vaginal examination of the patient revealed an ecchymotic mass 4-5 cm in size on the cervix. The cyst was punctured and the hematometra that had developed secondarily also drained spontaneously following the puncture of the mass. It should be noted that giant nabothian cysts and hematoma that causes these cysts to enlarge may result in clinical symptoms, however rare they may be.

Keywords: nabothian cyst, hematometra, secondary amenhorrea

Introduction: A nabothian cyst is a common gynecological condition in reproductive women with no clinical symptoms. These cysts are multiple opaque nodules on the cervix; they are also referred to as mucinous retention cysts and epithelial cysts. Nabothian cysts are caused by chronic inflammation of the cervix. They are usually very small in size, rarely growing larger than 4 cm. These cysts are mostly asymptomatic, but if they become very large and symptomatic, ablation will be adequate to solve the problem. However, if the diagnosis is not definitive, they can be excised for histopathological examination (1, 2, 3). Giant Nabothian cysts have been reported only in a few cases in the literature (4, 5, 6).

Case: A 49-year-old patient in her perimenopausal period presented to the clinic with the complaints of no menstruation for 2 months and groin pain. In her ultrasonography, increased uterus size, normal myometrium layer, hematoma filling the cavity completely and a cystic formation approximately 4x5 cm in size in the cervical region were seen (figure 1). Her ovaries had an atrophic appearance. In laboratory examination, her hormonal profile was compatible with perimenopausal signs. Her vaginal examination revealed a suspicious lesion, possibly a distended ecchymotic nabothian cyst on her cervix (figure 2). The cyst was drained from the vaginal route and approximately 100 cc of hemorrhagic material mixed with mucoid material was emptied (figure 3). Following the drainage of the cyst, hematometra was drained spontaneously from the cervical os. Thereafter, the endometrial sample and the cystic aspiration material taken were sent to the pathology. The pathological assessment result was nabothian cyst content and peripheral blood elements, and the endometrial sample result was fibrin, blood elements and tissue fragments compatible with secretory endometrium. The ultrasonographic examination of the patient after her next menstrual cycle revealed that her uterus was in normal size, endometrium appeared as a thin line, ovaries were in normal size and a nabothian cyst approximately 8 mm in size was present in the cervix. The clinical condition was assessed as nabothian cyst hematoma and hemotocolpos secondary to it.

**Discussion:** A nabothian cyst is caused by clogging of the canal openings to the cervix due to chronic cervicitis and is an asymptomatic clinical condition not requiring any treatment. Although nabothian cystsare common, nabothian cyst hematoma and hematocolpos developing secondary to it is a rare condition. In the literature, there are reports of patients whose deliveries were prevented due to a giant nabothian cyst and only after drainage normal deliveries were achieved as well as virgin patients who were assessed with suspicion of pelvic organ prolapsus and whose prediagnosed pelvic organ prolapsus had regressed after drainage. (7, 8, 9). A nabothian cyst in giant form is rare and clinically presents itself with its compression effect. The cervix is basically made up of a fibromuscular layer coated with columnar and squamous epithelium. The endocervicalcanal is covered by columnar or glandular epithelium and shows variation towards ectocervix. This epithelium is composed of a singlelayer of epithelial cells secreting epithelial mucin and the invagination of these epithelial cells forms the endocervical glands. The margin of endocervix and ectocervix is called squamocolumnar junction (SCJ). SCJ is in a constant repair process. In this process, the endocervicalcanal is clogged and nabothian retention cysts develop (3). Nabothian cysts are common, nonneoplastic cysts rarely having any clinical significance and are thought to form at the recovery stage of a chronic inflammatory process. No treatment is needed unless they reach very large sizes and there is a suspicion of malignity; ablation is generally sufficient for their treatment. However, histopathological examination will be required in deeply localized and large sized cysts if the diagnosis is not definite (1, 2, 3). In our case, we performed cyst excision and drainage, and pathologically assessed the material drained from the endometrial cavity and the endometrial curettage material. The differential diagnoses of cervical cysts include adenoma malignum, giant nabothian cyst, other benign tumors of the cervix and well-differentiated adenocarcinoma (3, 10). Endocervical polyps, leiomyoma, endometriosis, squamous papilloma, microglandular hyperplasia and mesonephric duct residues are the benign tumors of the cervix. Cervical myomas are solitary tumors of the cervix and they can degenerate and hang from the vaginal canal, and they require pathological examination for diagnosis. Histopathologically, nabothian cysts are benign lesions with histological appearance composed of well-differentiated mucinous glands and can be localized deep in the cervix. Although benign, these lesions sometimes need to be removed due to their symptomatic aspects. We discussed in our case a giant nabothian cyst and hematometra developed secondary to it. This condition may be encountered as one of the causes of secondary amenorrhea.

**Informed Consent**: Informed consent was filled by patient

*Conflict of interest:* No conflict of interest was declared by the authors.

Financial Disclosure: The authors declared that this study has received no financial support.

#### References:

- [1] Casey PM, Long ME, Marnach ML. Abnormal cervical appearance: What to do, when to worry? Mayo Clin Proc. 2011;86:147–51.
- [2] Katz VL, Lobo RA, Lentz G, et all. Comprehensive Gynecology. 5th Ed.Philadelphia, PA: Mosby/Elsevier; 2007:437-438.
- [3] Malpica A, Robboy SJ. Cervical Benign and Nonneoplastic conditions in: Robboy Pathology of Female Reproductive Tract.2nd Ed. Elsevier; 2009:141-166.
- [4] Nigam A, Choudhary D, Raghunandan C. Large nabothian cyst: a rare cause of nulliparous prolapse. Case Rep Obstet Gynecol. 2012;2012:192526.
- [5] Temur I, Ulker K, Sulu B, et all. A giant cervical nabothian cyst compressing the rectum, differential diagnosis and literature review. Clin Exp Obstet Gynecol. 2011;38(3):276-79.
- [6] Clement PB, Young RH. Deep nabothian cysts of the uterine cervix. A possible source of confusion with minimal-deviation adenocarcinoma (Adenoma malignum). Int J Gynecol Pathol. 1989;8(4):340-48.
- [7] Vural F,Sanvedi I,Coskun AD,Kusgöz A,Temel O.Large Nabothian Cyst Obstructing Labour Passage. Journal ofclinical of diagnostic research: JCDR.2015 Oct; 9(10): QD06-7
- [8] Nigam A, Chaudhary, Raghunandan. Large nabothian cyst:a rare cause of nulliparous prolapse C. Case reports in obstetrics and gynecology. 2012;2012:192526
- [9] Rampia N,Akaltun C,Korkmaz B,et all. .Nigam A,Chaudhary,Raghunandan Virgo hastada pelvik organ prolapsusu ile prezente olan nabothi kisti olgusu.Journal of gynecology-Obstetrics and Neonatology ISSN1304-5512 Supplement-1
- [10] Sosnovski V, Barenboim R, Cohen HI, Bornstein J. Complex Nabothian cysts: a diagnostic dilemma. Arch Gynecol Obstet. 2009;279:759–61. [PubMed]

Figure 1:Ultrasonographic figure before drainage

Figure 2:Nabothian cyst on the right hand side of the cervix prior to drainage from the vaginal route

Figure 3: Vaginal drainage

#### SÖZEL 33

# IS FECAL OCCULT BLOOD SCREENING EFFECTIVE IN EARLY DIAGNOSIS OF COLON CANCER?

Bülent Koca<sup>1</sup>, Sercan Büyükakıncak<sup>2</sup>,

#### AIM

We evaluated the results of colonoscopy in patients with no complaints and positive stool-occult blood test (SOB) performed at the Cancer Early Diagnosis Screening and Training Center (CEDSTC)). We compared it with the results of colonoscopy in patients with complaints. We aimed to investigate the early diagnosis of colon and rectum cancer of the SOB screening test.

<sup>&</sup>lt;sup>1</sup>Bafra State Hospital, Department of General Surgery, Samsun

<sup>&</sup>lt;sup>2</sup> Hackalıbaba State Hospita, Department of General Surgery, Trabzon

#### MATERIAL AND METHOD

The patients were divided into two groups as colonoscopy as a result of SOB scan and colonoscopy because of clinical complaints at the CEDSTC between 01.01.2017 ile 01.01.2018. The size and the stage of the tumor were compared in the cancer cases between the two groups. The data of the patients were recorded in the SPSS program. Statistical analyzes between the two groups were performed by chi-square test. P < 0.05 was accepted as the level of significance.

#### **RESULTS**

1116 patients (age: 21-89) were included to our study. 964 patients had colonoscopies because of clinical complaints and 152 patients had colonoscopies because of positive SOB test. . In the first group 35 patients had the diagnosis of colon-rectum cancer. The cancer rate was 3,6. The nine of those 35 patients were early enough stage to receive chemotherapy or radiotherapy after surgery. The rate of early stage diagnosis was %25. Eleven of the 152 patients had the diagnosis of colon-rectum cancer in the second group. Nine of those 11 patients were early enough stage to receive chemotherapy or radiotherapy after surgery. The diagnosis of early stage rate was %82. There was stastically significant difference between two groups in favour of SOB screen group. (p<0,000).

#### DISCUSSION AND CONCLUSION

SOB screening test and subsequent colonoscopy is an effective and reliable method in the early stage of colon-rectum cancer.

KEYWORDS: Gastrointestinal blood, colonoscopy, colon-rectum cance

#### SÖZEL 34

# ATTITUDE AND BEHAVIOR OF DRUG USAGE IN APPLICANTS TO THE FAMILY HEALTH CENTER

# Handan Duman<sup>1</sup>, <u>Hakan Duman<sup>2</sup></u>

<sup>1</sup> Ministry Of Health, Family Health Center, Rize

**Objective:** In many countries, drug costs constitute an important portion of the total health budget. The rational use of drugs means that patients use medicines in accordance with their clinical needs (recommended dose in a certain time) which keeps the cost at a minimum level for themselves and society. Therefore, the use of rational drug is important. In this study, we aimed to reveal drug use behaviors and attitudes of patients in the family medicine center.

Methods: Current research is a descriptive study. The 116 patients were randomly selected from the patients who attempted to the Rize 1 Line Family Health Center for any health problem. The research data were collected by a questionnaire including 29 questions for determining drug use

<sup>&</sup>lt;sup>2</sup>Department of Cardiology, Faculty of Medicine, Recep Tayyip Erdoğan University, Rize, Turkey.

behaviors and attitudes and sociodemographic characteristics, as well. Descriptive statistics and chi square test were used to present the study.

**Results:** Participants' age average is  $45\pm12.5$ , %59 of them female, %36 of them high school graduate. According to questionnaire, %22 of the patients take medicines without doctor's advice, %6 of them use medicines with advice of relatives, %11 of them buy medicines from the pharmacy without a doctor prescription, % 5 of them use the medicines available in their house. The 40% of the patients say they left treatment early because of feeling healthy. Drug use without doctor's advice was higher in participants with high school and/or lower education levels. The %38 of the patients have drugs in their house which they don't use, this medicines are analgesics (%38) and antibiotics (%47).

Conclusions: In this research, a significant proportion of the participants do not use the drugs rational behavior. There are important tasks for decision makers, health workers, media and educators to raise awareness about the use of medicines by individuals in society. The use of formal and non-formal education should be continued in the development of awareness of rational drug use. In this way, it may be possible to reach the expected benefits from the medicines.

Table 1: Distribution of Behavior Preferences of Respondents

| Parameters                                      | N  | %    |
|---|----|------|
| Asking relatives                                | 7  | 6    |
| I use the drugs at home                         | 6  | 5.2  |
| Buy from pharmacy without doctor's prescription | 13 | 11.2 |
| Family medicine                                 | 23 | 19.8 |
| State hospital                                  | 33 | 28.4 |
| Educational research hospital                   | 34 | 29.3 |

Table 2. Relationship between participants drug possession at home a sociodemographic characteristics.

|                   | Presence of medication at home |      |         |
|-------------------|--------------------------------|------|---------|
|                   | Yes                            | No   | p value |
| Educational level |                                |      |         |
| Primary school, % | 56.4                           | 43.6 | 0.255   |
| High school, %    | 67.2                           | 32.8 |         |
| Job               |                                |      |         |
| Student, %        | 0                              | 100  | 0.028   |
| House wife, %     | 43.8                           | 56.3 |         |
| Unemployment, %   | 35                             | 65   |         |
| Officer-worker,%  | 38.8                           | 61.2 |         |
| Retired,%         | 57.9                           | 42.1 |         |
| Marital status    |                                |      |         |
| Married, %        | 56                             | 44   |         |
| Single, %         | 0                              | 100  | < 0.001 |

# THE INCIDENCE OF PARATHYROID ADENOMA IN ELDERLY PATIENTS WITH RENAL INSUFFICIENCY AND THE AFFECTING FACTORS

# Dr. Mehmet Öncü

Bagcilar Training and Research Hospital, Department of Radiology

#### **PURPOSE**

Secondary hyperparathyroidism (SHPT), a very frequent, severe, and worsening complication of chronic kidney disease, is characterized by high serum parathyroid hormone (PTH), parathyroid gland hyperplasia, and disturbances in mineral metabolism. Clinically, SHPT shows renal osteodystrophy, vascular calcification, cardiovascular damage, and fatal outcome. Secondary hyperparathyroidism (SHPT), a common, serious, and progressive complication of chronic kidney disease (CKD), is characterized by high serum PTH, parathyroid gland hyperplasia, and disturbances in mineral metabolism, mainly hypocalcemia and hyperphosphatemia. I These mineral disturbances mainly cause renal osteodystrophy, progressive vascular calcification, and in turn, cardiovascular disease and death, especially in patients receiving hemodialysis. Early detection of the disease before clinical manifestations are evident is important so that treatment with vitamin D3 or calcium can be undertaken. The aim of this study is to prevent early recognation and possible complications of parathyroid adenomas with usg in dialiysis patients.

#### **METHOD**

Dialysis patients over 65 years of age and high serum parathormone levels were included in the study. Ultrasonography (USG) was performed using the APLİO 500 Toshiba with an 8 - 13MHZ linear-array transducer. There are normally two pairs of parathyroid glands inferior and superior , although there can be up to twelve in number. The parathroid glands can have a variable location but are usually in close relation to the thyroid gland

Superior parathyroid glands :located at the posterior aspect of the middle —third of the thyroid gland

İnferior parathyroid glands :located lateral to the inferior pole of the thyroid gland The parathyroid gland is oval or bean-shaped. It typically measures 6x4x2 mm and weighs 40-60 mg.

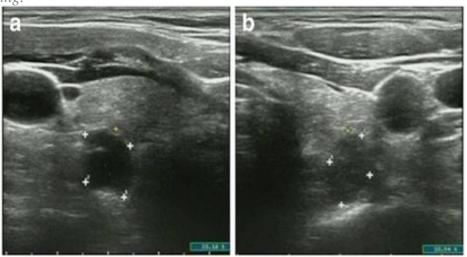


fig 1:An elderly patient with secondary hyperparathyroidism performed the ultrasonography. The image a showed an enlarged parathyroid gland on the left, with a size of 13.5 mm  $\times$  10.8 mm. The image b showed the right enlarged parathyroid gland, with a size of 8.2 mm  $\times$  12.8 mm

# **RESULTS**

When the potential predictive risk factors for parathyroid adenoma were examined ,age was found to be a significant predictive risc factor.

There was no correlation between dialysis duration and parathormone level (Spearman correlation test R = 0.191, p = 0.171)

Biserial correlation showed a significant relationship between the presence of adenoma and age, presence of adenoma and serum PTH level. However, there was no correlation between the duration of CRF, duration of dialysis, serum BUN level and serum creatinine level.

Dermographic and clinical features of the cases

|                              | Parathyroid<br>adenoma cases<br>(n= 25) | Healthy cases (n= 28) | P value  |
|------------------------------|---|-----------------------|----------|
| Age                          | 71.0(7.5)                               | 68.0(6.5)             | 0.020*   |
| Female/male                  | 14/11                                   | 14/14                 | 0.662**  |
| CRF duration (year)          | 6.0(6.0)                                | 6.0(5.0)              | 0.508*   |
| Diyalisis duration<br>(year) | 4.0(3.5)                                | 2.5(4.8)              | 0.148*   |
| BUN(mg/dL)                   | 14.0(9.6)                               | 12.0(10.2)            | 0.748*   |
| Kreatinin (mg/dL)            | 2.9 (1.0)                               | 2.8 (1.0)             | 0.665*** |
| PTH (pg/mL)                  | 1021.4(859.0)                           | 455.0(295.9)          | 0.024*   |

<sup>\*</sup>Mann Whitney - U test, \*\* Likelihood Ratio chi-square test, \*\*\* Non-paired t-test Data average: \* Median (interquartile interval); \*\* Arithmetic mean (standard deviation) was given.

## **DISCUSSION**

Seconder hyperparathyroidism is a frequently encountered problem in the management of patients with chronic kidney disease.this condition has a high impact on the mortality and morbidity of dialysis patients. Early diagnosis of secondary hyperparathyroidism is crucial in the management of patients CKD. During early seconder hyperparathyroidism, the blood calcium levels are normal or low, but the PTH level is high., High PTH levels can lead to 1) weakening of the bones 2) calciphylaxis (when calcium forms clumps in the skin and leads to ulcers and potentially death of surrounding tissue), 3) cardiovascular complications, 4) abnormal fat and sugar metabolism, 5) itching (pruritis), and 6) low blood counts (anemia).

According to our study results, high PTH levels in dialysis patients increase the risk for parathyroid adenoma. ultrasonography can be considered as the first choice in terms of parathyroid adenoma.

Ultrasonography in the diagnosis of parathyroid adenoma is an easy ,cheap and highly reliable diagnostic method.

# THE SITUATION OF FAMILY PHYSICIANS AND HOME CARE SERVICES IN PATIENTS WHICH FEED WITH PEG AT EAST ANATOLIAN REGION

## Hüseyin EKEN, Eray KURNAZ

## Erzincan Binali YILDIRIM unuversty school of medicine department of general surgery

INTRODUCTION Malnutrition is one of the main reason for decreasing the life quality. Sufficient regulation of enteral nutrition is associated with improved clinical outcomes. The gold standard method used for this purpose is Percutaneous Endoscopic Gastrostomy (PEG). A strong recovery and improved nutritional status have been demonstrated in patients with enteral feeding at home. For this reason, home care professionals and family physicians identified patients fed by PEG at home. PEG care, caloric status, PEG changes were evaluated and the study was performed to correct the deficiencies.

MATERIALS AND METHOD A questionnaire was prepared to be completed by the family physicians working in our region and the results were evaluated.

RESULTS The survey results were created by fifty family physicians working in our region. It was seen that 80% of physicians did not receive training on PEG and nutrition from PEG during their education in medical school. 60% of the physicians followed a PEG patient during their professional life. 50% of physicians experienced complications in PEG. It was learned that 60% of the physicians had prescribed enteral nutrition solution and 80% of the prescriptions were not calorie counted. Hypertension is the most common additional disease seen in patients with PEG. The most common problem that the families of PEG patients have in home care is the dressing and clogging of PEG. The most common indication for PEG is neurological diseases. It was seen that 80% of physicians had insufficient knowledge and equipment in terms of PEG care and feeding from PEG and 80% of them wanted to receive in-service training on PEG care and enteral nutrition.

DISCUSSION In the literature, there is not much study on nutritional assessment of patients which fed home with PEG. The gold standard feeding method used in home-fed patients is PEG. In order to improve the nutritional status of the patients and to reduce the complications associated with PEG, more attention should be given to nutrition during the medical school education. In addition, the in-service training after graduation is thought to reduce complications. Further studies are needed on the subject.

CAREGIVING BURDEN AND QUALITY OF LIFE IN CAREGIVERS OF THE CHILDREN WITH FAMILIAL MEDITERRANEAN FEVER

1- Zahide KOŞAN<sup>1</sup>; Dr. Öğr. Gör. ; Atatürk Üniversitesi Tıp Fakültesi Halk Sağlığı Anabilim Dalı ; Erzurum

2- Edanur KÖYCEĞİZ; Arş. Gör. Dr. ; Atatürk Üniversitesi Tıp Fakültesi Halk Sağlığı Anabilim Dalı ; Erzurum

Aim and Introduction: Familial Mediterranean Fever (FMF) is a chronic inflammatory systemic disorder characterized by fever and serositis with a course of recurrent episodes. Childhood chronic diseases put a heavy burden on the families with their treatment methods, illness trajectory, limitations in daily activities and their long-term impacts. This condition also has a negative effect on the caregivers' quality of life (QoL). In this study, we aimed to assess the QoL of parents of the children diagnosed with FMF and the burden on the caregivers, to determine the current status, and recommend some measures for improving the QoL of the parents and for also decreasing their burden.

Materials and Methods: Target population of this descriptive study comprises the participating parents of the children diagnosed with FMF and regularly followed-up between 01.01.2017-12.31.2017 in the pediatric nephrology department at a Faculty of Medicine. We reached %90 of the 100 samples for whom ethics committee approvals and administrative consents had been obtained. Shorter and Turkish version of The World Health Organization Quality of Life Scale instrument (WHOQOL-BREF-TR) consisting 27 items, socio-demographic personal information forms for parents and children, and 22-item Zarit Caregiver Burden Scale were used to collect data. Obtained data were analyzed with SPSS v22.

**Results:** The average age of the participants was  $41.56\pm8.04$ , with 63.3% female population and with a rate of 68.9% elementary/middle school graduates. 24.4% of them had multiple children with FMF. Parents' mean score of Zarit Caregiver Burden Scale was  $44.77\pm13.55$  and there was no statistically significant difference between the both maternal and paternal score averages (p=0.854). Mean scores of Zarit Caregiver Burden Scale of the illiterate parents were significantly higher than those of university graduates (p=0.045). Mean scores of Zarit Caregiver Burden Scale of conjugal family parents were significantly higher than the scores of the parents in the extended families (p=0.029).

Mean scores of WHOQOL-BREF-TR domains were;  $15.00\pm2.58$  for physical health,  $14.92\pm2.54$  for psychological,  $15.03\pm2.98$  for Social relationships, and  $14.28\pm2.42$  for environment. Among all maternal QoL domains, psychological domain score was significantly higher (p=0.043). Social relationships domain scores of the illiterate parents were significantly lower than those of the university graduates (p=0.028).

Conclusion and Recommendations: We found significantly higher mean scores of psychological QoL domain for the mothers and social relationships domain scores for the parents with a bachelor's degree, as Zarit Caregiver Burden Scale scores were significantly higher in illiterate and conjugal family parents. Developing and implementing social support programs and educating the parents in health may help lessening the caregivers' burden and improving their OoL.

**Keywords:** Familial Mediterranean Fever (FMF), Quality Of Life, Caregiver, Children

# IN PATIENTS WITH NUTRITIONAL DISORDER: OUR EXPERIENCES IN PERCUTANEOUS ENDOSCOPIC GASTROSTOMY APPLICATIONS

## Gökay Ateş, Sercan Büyükakıncak

Akçaabat Haçkalı Baba Devlet Hastanesi Department of Anesthesiology and Rehabilitation Akçaabat Haçkalı Baba Devlet Hastanesi Department of General Surgery

Introduction: Percutaneous endoscopic gastrostomy (PEG) is a treatment option in patients who have normal enteral system functions with inadequate or no oral ingestion, loss of swallowing reflex and difficulty swallowing and aspiration risk in oral intake. The first choice to meet the energy needs of the body is the use of the gastrointestinal tract (GIS). It is aimed to prevent translocations by protecting GIS flora by feeding with PEG. We aimed to evaluate our patients with PEG indication.

Methods: PEG procedure was performed to 230 patients between 2012-2018, in our hospital, endoscopy unit. We applied procedure to our patients staying at neurology, intensive care unit and who were referred from environmental hospitals for the purpose of the procedure, who have life expectancy and had more than 3 weeks of nutritional requirements.

Results: 150 of the PEG patients were male (65.22%). The mean age was 72±20.45 years. While normally gastroscopic procedures need dormicum 0.03 mg/kg, and profol 0.5 mg / kg; the patients accepted as at high risk group, ASA 3 according to American Society of Anesthesiologists and only dormicum 0.04 mg / kg was applied. There was no major complication during the procedure. Wound infection developed in 12 patients. PEG were dislocated due to patient incompatibility for 15 patients. After 24 hours of peg insertion, the dose feeding was started with low-dose and increased with the toleration with 6-hour intervals. During the discharge period, nutrition education was given to the relatives of the patients. After discharge, visits were made by home care department and the patients were controlled in terms of nutritional deficiency with laboratory and physical examinations.

Discussion: PEG administration provides the advantage of less complications and ease of application compared to other nutrition methods in providing long-term nutritional support and meeting the caloric needs in GIS healthy patients. According to the body mass index, missing laboratory parameters, calorie dose is calculated and appropriate medical treatment is given. It is an expensive procedure. Complications include wound infection, gastric outlet obstruction, aspiration, diarrhea and gastroparesis.

Conclusion: PEG procedure is an interventional procedure which is mostly performed in a risky patient group, and should be followed carefully. With the new practices of the Ministry of Health, routine care is carried out by the home care services and the family physicians to which the patient is connected. Clinical nutrition societies contribute to education by organizing meetings and courses. Success in health needs multidisciplinary approach. We are proud to be in this team with family physicians.

# EVALUATION OF PENTRAXIN 3 LEVEL AND CARDIAC FUNCTION IN PSORIATIC CHILDREN

# İbrahim Halil Yavuz,

Department of Dermatology, Medical Faculty of Yüzüncü Yıl University, Van Abstract

Aim: Psoriasis is a chronic inflammatory disorder affecting the skin, nails, and joints. Its prevelance has been estimated to be at 1% to 3% with lifetime in population. This study was designed to examine the association between serum pentraxin 3 (PTX3) and cardiovascular function in psoriatic children.

Materials and Methods: 33 children who were diagnosed with psoriasis, and 29 healthy children, between 4 and 18 years of age, were included in the study. Both patient and control group was evaluated by the pulsed wave tissue <u>Doppler echocardiography</u> (TDI), as well as with conventional Doppler echocardiography (CDE). PTX3 values of the groups were evaluated.

**Results:** There was no difference between cases and controls for age  $(9.67 \pm 3.72, 9.60 \pm 2.84)$  years, p=0.916, respectively). In evaluation of LV (left ventricle) CDE; A wave, isovolumic relaxation time (IVRT) and myocardial performance index (MPI) were significantly higher in study group (p<0.05). Ejection time (ET) was significantly lower in study group compared to control group (p<0.05). In evaluation of LV TDI; Deceleration time (DT'), IVRT', E/E' and MPI' were found to be significantly higher in study group (p<0.05). In addition to, E', E'/A' and ET' were significantly lower in study group. PTX3 level was significantly higher in the study group compared to the control group (p=0.009) (Table 3). However, no correlation was found between PTX3 level and cardiovascular parameters.

Conclusion: Both doppler echocardiography and PTX3 may be useful tools for the screening of CV risk in these patients. Psoriasis itself may be an independent risk factor for cardiac dysfunction in pediatric population.

#### SÖZEL 40

# ATRIAL FIBRILLATION, CAN PROTECTIVE OF HONEY INTOXICATION?

Osman Bektas, Dr. Öğretim Üyesi, Ordu Üniversitesi Kardiyoloji A.D., Ordu/Türkiye Abstract

**Objective:** The aim of this study is; In honey intoxication; Especially the effects on the cardiac electrical activity system; Contributing to clarification of the mechanism of action and sharing clinical dermographic data of relatively common honey intoxication cases in this region.

*Method:* In this study; Between July 2012 and July 2014 clinical, demographic characteristics and blood samples of 28 patients diagnosed with mad honey poisoning in our emergency department were examined.

Findings: Eleven of 28 patients who were referred to our clinic retrospectively for honey intoxication were women. The mean age of the patient population was  $46 \pm 12$ . The Heart Rate was  $45 \pm 7$  / min. When the rhythms determined at the time of application of the patients were evaluated, sinus bradycardia was found in 19 (67.8%), II. Degree AV block 1 (3.5%), III. Degree AV block 3 (10.7%) was detected. At the time of admission, none of the 28 patients had atrial fibrillation.

*Conclusion:* The absence of atrial fibrillation in our patients suggests that atrial fibrillation may be protective against honey intoxication.

## SÖZEL 41

SEROPREVALENCE OF ANTI-TOXOPLASMA GONDİİ, ANTİ-RUBELLA, ANTİ-CYTOMEGALOVİRUS IG M AND IG G ANTİBODİES AMONG PREGNANT WOMEN İN RİZE, TURKEY

## Beril Gürlek<sup>1</sup>

<sup>1</sup>Department of Obstetrics and Gynecology, Recep Tayyip Erdogan University School of Medicine, Rize, Turkey.

#### Introduction:

TORCH is an acronym which stands for Toxoplasmosis, Other (Parvovirus B19, Varicella-Zoster virus infection, Syphilis, Hepatitis B), Rubella virus, Cytomegalovirus infection and Herpes Simplex virus infection. These groups of infections are the main threats of serious congenital infection during pregnancy, which are one of the most important causes of perinatal morbidity and mortality, particularly in developing countries (1). They are associated with high risks of congenital infections which may cause congenital malformations, abortions, premature deliveries and stillbirths during pregnancy (2,3). These microorganisms spread through poor hygienic conditions, contaminated blood, water and soil and airborne respiratory droplet and vertical transmit to the fetus from mother with transplacental way during perinatal period (4). Prenatal care currently holds no true standard for antenatal management of viral infections during pregnancy and no treatment or preventative strategy is available to prevent adverse pregnancy outcomes (5).

CMV is one of the most clinically important and common cause of in utero viral infections of the fetus, with a birth prevalence of 0.5% to 2.5% (6,7). The fetus may be infected by either a primary or a secondary maternal infection. Maternal antibodies to CMV do not prevent reactivation of latent disease or reinfection. Approximately 90% of primary infection and most of secondary infection are asymptomatic in mother. Reported symptoms are fever, fatigue, myalgia, hepatitis, lymphadenopathy (8). Vertical transmission is 30% to 50% after primary infection and less than 1% after secondary infection. Infants showed various complications such as optic atropy, microcephaly, hypotonia, intracranial calcifications, and decrease hearing, pneumopathy, thrombocytopenic purpura (9). The severity of fetal infection depends on viral load in amniotic fluid. If the mother has a primary infection during pregnancy, fetal morbidity rate is increased(10). Most newborns of women with primary CMV infection and almost all newborns of women with secondary infection in pregnancy are initially asymptomatic. Approximately 5 to 20% of newborns of mothers with primary CMV infection will have

symptoms at birth. The mortality rate of these newborns is about 5%. 5 to 15% of the asymptomatic newborns will develop sequelae later in life (5, 11)

Rubella virus is a ribonucleic acid virus that belongs to the Togavirus family and the most important teratogen microorganisms. The virus replicates primarily in the nasopharynx, primary infection of the mother occurs by respiratory transmission. During maternal viremia, maternal-fetal transmission can occur via hematogenous spread. After infecting the placenta, the virus spreads through the fetal vascular system (12). 10 to 54% of the fetuses of infected women during the first three months of pregnancy can be affected by the virus (13). Infection especially in the first three months of pregnancy can cause abortion, premature birth, still-birth, congenital defects like, deafness, cataracts, blindness, microcephalus and several congenital cardiac defects, as well as asymptomatic infection (14,15).

Toxoplasma gondiiis is an obligate intracellular parasite that causes infection to human and many mammals. Infection occurs by consuming undercooked meat containing oocytes, consumption of insect-containing foods, by contact with oocytes in the feces of infected cats, or contact with infected insects in soil (16). Most people who are infected with toxoplasmosis are asymptomatic. When symptoms occur, they are nonspecific such as headache, fever, fatigue, and muscle aches (17). During maternal parasitemia the parasite crosses the placenta and infects the fetus (16).

Only 10-15% infant shows clear symptoms such as skull and encephalic anomalies, neurological afflictions, hydrocephalus, microcephalus, cerebral calcifications, chorioretinitis and microphthalmia. Moreover, only 5% infants have severe complications like thrombocytopenia, anemia, jaundice, hepatomegalia, maculopapular rash (18-20).

The early recognition of these infections in the mother and fetus is an important component of prenatal care (21). Since these maternal infections are initially asymptomatic and the clinical diagnoses are unreliable, diagnosis of acute infection in pregnant women usually relies on serological tests such as specific IgM and IgG antibody (22).

In this study, it was aimed to investigate retrospectively Toxoplasma, Rubella and Sitomegalovirus seroprevalence in pregnant women who applied to a 'University Hospital Obstetrics Clinic' for routine follow-up in Rize province.

#### Materials and Methods

This retrospective study evaluated the toxoplasma gondii, rubella and CMV IgM and IgG seropositivity rates in pregnant females followed at the Department of Obstetrics and Gynaecology, in the Medical Faculty of Rize Recep Tayyip Erdogan University. Approval was obtained from the ethics committee of the University. Serum analyses were performed using the chemiluminescence immunoassay on the Architect-I2000 system (Abbott Diagnostics, USA), according to the manufacturer's instructions. Toxoplasma IgM antibody titres exceeding a 0.5 index and toxoplasma IgG antibody titres exceeding 1.6 mg/dL were considered positive. For rubella, IgM and IgG antibody titres exceeding 1.2 and 10.0 mg/dL, and for CMV, IgM and IgG antibody titres exceeding 0.85 and 6.0 mg/dL were considered positive, respectively. Statistical analyses were performed using SPSS 25.0 (SPSS, Chicago, IL, USA).

#### Regults

The files of 2314 pregnant women who visited the clinic between January 2015 and December 2017 were screened. The mean age of the participants was  $29.13 \pm 5.34$  (range 18-45) years, at an average pregnancy of  $8.38 \pm 3.72$  weeks. The rates of IgM positivity for Toxoplasma gondii

was 0.82% (19/2314), Rubella was 0.86% (20/2314), and CMV was 1.59% (37/2314); whereas the rate of IgG positivity was 36.1% (656/1815) for Toxoplasma. gondii, 91.8% (1655/1801) for Rubella, and %99.2% (1768/1781) for CMV.

#### Discussion

Infection with one of the Toxoplasma gondii, Rubella virus or cytomegalovirus contracted during pregnancy may pass through placenta to the fetus affecting the fetus and newborn potentially causing serious birth defects. Moreover, asymptomatic infants may develop abnormalities later in life (23). Researchers discuss the efficiency and cost of prenatal screening programs because of the presence of reinfection and inability of the test results to show feutal and newborn complications (24). But, screening tests are still required especially in endemic areas because of the serious adverse pregnancy outcomes (24).

For determining routine screening of congenital infection in a region, first, it is necessary to know the seropositivity rates of the region. In our study, in Rize, 0.2 and 36.1% of the subjects had IgM and IgG against Toxoplasma gondii, respectively. The corresponding figures for rubella and CMV are 0.86 and 91.8% and 1.59 and 99.2%, respectively. The reported respective figures for Toxoplasma gondii IgM and IgG positivity for Turkey are 0.3–3% and 18.3–60.4%. The reported rubella IgM and IgG positivity rates are 0–1.8% and 76.6–99.5%, respectively. Similarly, CMV IgM or IgG was found in 0.1–3.2% and 80.3–99.8% of the populations tested (2).

In conclusion, the results for Toxoplasma gondii, Rubella and CMV seropositivity among pregnant women in Rize are similar to those found in other regions of Turkey. Seropositive of rubella and CMV were found frequently among the population but seropositive of Toxoplasma gondii is seen more rare. Serological screening of all pregnant women for Rubella virus, and CMV may not be recommended due to the high seropositivity rates detected in our region, whereas routine screening should be considered for Toxoplasma gondii because of the high seronegativity results. However, further studies is required to cost-effectiveness of such a screening program during pregnancy in Turkey.

**Keywords:** Cytomegalovirus, pregnant females, prevalence, rubella, toxoplasma

## Conflict of Interests

*The author declare that they have no conflict of interests.* 

#### Funding Statement

There is no sponsorship or financial support in this work.

## References

- 1. Sharma S, Duggal N, Agarwal S, Mahajan RK, Anuradha, Hans C. Seroprevalence of Toxoplasma, Rubella and CMV infections in Antenatal Women in a Tertiary care hospital in North India. J Commun Dis 2015;47:23-26.
- 2. Aynioglu A, Aynioglu O, Altunok ES. Seroprevalence of Toxoplasma gondii, Rubella and Cytomegalovirus among pregnant females in north-western Turkey. Acta Clin Belg 2015;70:321-324.
- 3. Parlak M, Çim N, Nalça Erdin B, Güven A, Bayram Y, Yıldızhan R. Seroprevalence of Toxoplasma, Rubella, and Cytomegalovirus among pregnant women in Van. J Turk Soc Obstet Gynecol 2015;2:79-82.

- 4. Yadav RK, Maity S, Saha S. A review on TORCH: groups of congenital infection during pregnancy. Journal of Scientific and Innovative Research 2014;3:258–264.
- 5. Silasi M, Cardenas I, Kwon JY, Racicot K, Aldo P, Mor G. Viral infections during pregnancy. Am J Reprod Immunol 2015;73:199–213.
- 6. Scott L.L. Hollier, and L.M. and K. Dias, Perinatal herpesvirus infections. Herpessimplex, varicella, and cytomegalovirus. Infect. Dis. Clin. North Am. 1997;11(1): 27–53.
- 7. Ornoy A, Diav-Citrin O. Fetal effects of primary and secondary cytomegalovirus infection in pregnancy. Reprod Toxicol. 2006;21:399–409.
- 8. Wilson-Davies, E.S.W., C. Aitken. When should the "TORCH" study be requested, Paediatr. and Child health 2013; 23: 226-228.
- 9. Boyer SG and Boyer KM. Update on TORCH Infections in the Newborn Infant, Newborn and Infant Nurs. Rev. 2004;4:70-80.
- 10. Ammer Abdulhamid Mohammed. Frequency of IgM & IgG antibodies against Toxoplasma gondii, Cytomegalovirus and Rubella virus in serum specimens from aborted women in North Baghdad-Al Tarmiya region. Al-Kufa University Journal for Biology 2016;8(3): 137-143.
- 11. Yinon Y, Farine D, Yudin MH. Screening, diagnosis, and management of cytomegalovirus infection in pregnancy. Obstetrical & gynecological survey. 2010;65:736–743.
- 12. Atreya CD, Mohan KV, Kulkarni S. Rubella virus and birth defects: molecular insights into the viral teratogenesis at the cellular level. Birth Defects Res A Clin Mol Teratol. 2004;70(7):431-437.
- 13. Turbadkar D, Mathur M, Rele M. Seroprevelence of torch infection in bad obstetric history. Indian J Med Microbiol. 2003;21:108-10.
- 14. Deorari, A.K., Broor, S., Maitreyi, R.S., Agarwal, D., Kumar, H. and V.K. Paul, Incidence, clinical spectrum and outcome of intrauterine infections in neonates. J. Trop. Pediatr. 2000;46(3):155-159.
- 15. Reef SE, Plotkin S, Cordero JF, et al. Preparing for elimination of congenital rubella syndrome (CRS): summary of a workshop on CRS elimination in the United States. Clin Infect Dis. 2000;31(1):85-95.
- 16. ACOG. Practice bulletin no. 151: Cytomegalovirus, Parvovirus B19, Varicella Zoster, and Toxoplasmosis in pregnancy. Obstet Gynecol. 2015;125(6): 1510-1525.
- 17. Dhakal R, Gajurel K, Pomares C, et al. Significance of a positive toxoplasma immunoglobulin m test result in the United States. J Clin Microbiol. 2015;53:3601-3605.
- 18. SYROCOT (Systematic Review on Congenital Toxoplasmosis) study group, Thiébaut R, Leproust S, et al. Effectiveness of prenatal treatment for congenital toxoplasmosis: a meta-analysis of individual patients' data. Lancet. 2007;369:115-122.
- 19. Feldman DM, Timms D, Borgida AF. Toxoplasmosis, parvovirus, and cytomegalovirus in pregnancy. Clin Lab Med. 2010;30(3):709–20.
- 20. Chiodo F, Verucchi G, Mori F, Attard L and Ricchi E. Infective diseases during pregnancy and their teratogenic effects, Ann. Ist. Super. Sanita 1993; 29: 57-67.
- 21. Sebastian D, Zuhara KF, Sekaran K. The influence of the TORCH infections in first trimester miscarriage in the Malabar region of Kerala. Afr J Microbiol Res 2008; 2: 56-59.
- 22. Mendelson E, Aboudy Y, Smetana Z, Tepperberg M, Grossman Z. Laboratory assessment and diagnosis of congenital viral infections: Rubella, cytomegalovirus (CMV), varicella-zoster virus (VZV), herpes simplex virus (HSV), parvovirus B19 and
- human immunodeficiency virus (HIV). Repr Toxicology 2006;21: 350-382.
- 23. Sadik MS, Fatima H, Jamil K, Patil C. Study of TORCH profile in patients with bad obstetric history. Biol Med. 2012;4(2):95-101.
- 24. Duran B, Toktamış A, Erden Ö, ve ark. Doğum öncesi bakımda tartışmalı bir konu: TORCH taraması. C.Ü. Tıp Fakültesi Dergisi 2002;24:185-190.

THE EVALUATION OF FINDINGS AND TREATMENTS WITH REGARD TO CERVICOVAGINAL SMEAR AND ONCOGENIC HPV SCREENING TEST REFERRED BY THE CANCER EARLY DIAGNOSIS, SCREENING AND TRAINING UNIT

# Murat ALAN(1), Beril GÜRLEK(2)

- (1) Department of Gynecology and Obstetrics ,Saglık Bilimleri University,Tepecik Education and Research Hospital.İzmir-Turkey
- (2) Department of Gynecology and Obstetrics, Recep Tayyip Erdogan University, Medical Faculty. Rize-Turkey.

#### Aim:

The agent mainly held responsible for the onset and development of cervical cancer and intraepithelial lesions is HPV. Cervicovaginal smear and HPV screenings are highly effective in the early diagnosis of preinvasive lesions, preventing the development of cervical cancer in no small measure. Being the second most common cancer type among 15-44 aged women, the cervical cancer is observed on approximately 500,000 new patients each year. In countries where the screenings are carried out on a regular basis, a significant decrease has been observed in the rates of cervical cancer related mortality and morbidity.

#### Methods:

The evaluation of 700 cases referred to our oncology unit with positive oncogenic HPV type between 2017 and 2018 has been carried out. These cases are the ones whose cervical pap smear and oncogenic HPV screenings were made in the Cancer Early Diagnosis, Screening and Training Unit. And out of these, the ones suspected for cervical cancer were referred to our center. All further study, examination and operations were performed in our center.

#### Results:

The colposcopy, biopsy and surgical results of 700 patients referred to our center for further study and examination were discussed. And 14 of them were diagnosed with cervical cancer. The clinical course of the cancer and the other precursor lesions in all the referred patients and the staging and tracking phases of the surgical ones will all be discussed. It was the effective implementation of screening programs that let these patients be diagnosed in early surgical phases and have trouble-free operations.

#### Conclusions:

Thanks to its long preinvasion period and the screening programs paving the way for early diagnosis, the cervical cancer is a treatable one among female genital cancers. The awareness of women should be raised with regard to the results, tracking, treatment, risk factors and protection methods of the cervical cancer. And the cervical cancer screening should regularly be carried out in the most effective way to the appropriate population.

# ROLE OF PROCALSITONIN LEVELS IN EARLY DIAGNOSIS OF ACUTE KIDNEY INJURY IN INTENSIVE CARE PATIENTS

# Ebru Çanakçı<sup>1</sup>, Ahmet Karataş<sup>2</sup>

- (1):Ordu University ,School of Medicine ,Department of Anesthesiology and Reanimation, Ordu, Turkey
- (2): Ordu University ,School of Medicine ,Department of Internal Medicine Division of Nephrology ,Ordu, Turkey

#### Background and Aim:

Acute kidney injury is a major cause of morbidity and mortality in critically ill patients. Because of this reason RIFLE and AKIN classifications have been established for recognition of kidney damage in the care of critically ill patients. The kidney damage in intensive care patients usually develops on sepsis ground. Procalsitonin is a new biomarker with high sensitivity and specificity used in diagnosis of sepsis. However, there are not enough studies in the literature showing the role of procalsitonin levels in acute kidney injury. We aimed to investigate the role of blood procalsitonin levels in diagnosis in critically ill patients with renal failure in this study.

#### Materials and Methods:

Seventy adult patients aged between 18 and 85 years in the intensive care unit were included in this study. The patients were divided in two groups. The patients with renal failure while receiving intensive care unit were identified as Group AKI (n=35) and the patients without renal failure while receiving intensive care unit were idendified as Group Non-AKI (n=35). RIFLE classification was used for the assessment of renal damage and APACHE II and SOFA scoring systems were used for assessment of intensive care disease severity. The patients who had neutropenia, HIV infection, septic shock, chronic renal failure and were receiving hemodialysis were excluded from this study. Procalsitonin levels, Hb, Htc, WBC, platelet, CRP, Na, K, urea, creatinine and lactate levels in blood were measured during the first day of intensive care unit. Data were recorded with SPSS 21.0 program and analyzed by Ordu University, Faculty of Medicine, Department of Biostatistics.

Findings: The age and APACHE II scores of the patients in Group AKI were significantly higher than Group Non-AKI (p=0.04, p=0.029 respectively) and when we analyze patients according to their demographic characteristics. There was no significant difference between SOFA scores and gender distributions betweens groups (p=0.123, p=0.08 respectively). Procalsitonin, WBC and CRP levels were significantly higher in Group AKI (p<0.001). BUN and creatinine levels were significantly higher in Group AKI (p<0.001). There was a significant correlation between procalsitonin levels and creatinine levels (p<0.001, r=0.71).

Conclusion: Procalcitonin levels were found significantly higher than those in patients with acute renal failure in intensive care unit. Procalsitonin levels were associated with the disease severity in the patients with acute kidney injury. We believe that our study will shed light on larger population studies in the future.

Key Words: Acute Kidney Injury, Procalsitonin, Creatinine

|                        | Group Non-<br>AKI |                    |           | Group AKI          |         |
|------------------------|-------------------|--------------------|-----------|--------------------|---------|
|                        | mean±std          | Med(Min-<br>Max)   | mean±std  | Med(Min-<br>Max)   | P       |
| Age                    | 55.7±11.5         | 52(22-80)          | 67.1±10.1 | 65(32-85)          | 0.04    |
| APACHE II score        | 17.7±6.1          | 14(7-35)           | 22.8 ±8.5 | 19(10-38)          | 0.029   |
| SOFA score             | 2.3±1.8           | 2(0-5)             | 2.9±1.9   | 2(1-7)             | 0.123   |
| CRP Level              | 4.1±1.9           | 3,1(0,5-18,1)      | 12±2.3    | 11,4(2,1-<br>19,8) | p<0.001 |
| Procalsitonin<br>Level | 2±1.5             | 0,45(0,06-<br>2,4) | 20±4.1    | 3,46(1.4-<br>64,4) | p<0.001 |
| Creatinine             | 0.8±1.25          | 0,64(0,24-<br>1,2) | 1.5±0.88  | 1,89(1,21-<br>4,8) | p<0.001 |
|                        | n                 | %                  | n         | %                  |         |
| Gender                 |                   |                    |           |                    | 0.08    |
| Male                   | 20                | 57.15              | 22        | 62.85              |         |
| Female                 | 15                | 42.85              | 13        | 37.15              |         |

Tablo 1:Distribution of general demographic characteristics of data by the groups

# DIAGNOSTIC APPROACH TO IMPAIRED CONSCIOUSNESS IN EMERGENCY DEPARTMENT

## Neurologist. Dr. Demet Aygün, Medicine Hospital, Istanbul, Turkey

AIM: In emergency departments, using the correct diagnostic methods are important for diagnosis on the patients with seizures, encephalopathy and encephalitis clinics. It was planned to present the results for diagnosis methods in patients with mental status, epileptic seizures in emergency department.

METHOD: In this study, the patients with mental status, seizure and seizure-like condition in Emergency Department between January and August of 2018 who had consulted to neurology unit reviewed retrospectively for differential diagnosis, diagnostic examinations. All of these patients were over 18 years of age.

RESULTS: The documentations of 158 patients were analyzed. Within the sample 98 (62%) were male and 60 (37.9%) were female. Mean age of the patients was 47.7 + 17.4 years. (range 15-93 years). In these group 48 patients (30.3%) were applied with generalized or focal epilepsy. In 18 of 48 patients (%37,5) who diagnosed with epilepsy before were drug disruption history. Blood glucose, blood count, electrolytes, electrocardiograms were

performed from all patients. Hypoglycemia in 11 patients (%6,9) and cardiac causes in 18 patients (%11,3) were founded. In 98 patients Cranial Computed Tomography (CT) had been performed to rule out bleeding or structural lesions. Intracranial tumor was founded in 12 patients (%12,2) and hematoma was founded in 5 patients (%5,1) of these group. In 60 patients who had hemiparesis Magnetic Resonance imaging (MRI) were performed to rule out cerebrovascular stroke (CVS) and carotid-vertebrae neck vascular ultrasonography performed to exclude carotid stenosis. In the 48 patients(%80) of these group had intracranial ischemic acute infarct. In 4 patients(%2,5) suspected with cranial nervous system (CNS) infection who had abnormal findings on neurological examination and high body temperature were performed with lumbar puncture (cerebro spinal fluid cell, protein, glucose). In 3 patients (%75) of these group CNS infection were diagnosed. Electroencephalography (EEG) performed to separate seizure and pseudo seizure attacks to all patients and 79 of the patients were had EEG abnormalities. No other cause was found in the other 79 (%50) patients, psychogenic causes were excluded.

DISCUSSION: In this study shows that, using the diagnostic methods in emergency departments are important in terms of prognosis for seizure, encephalopathy and encephalitis. Knowing the situations in which diagnostic methods are used is also important for emergency medicine.

#### SÖZEL 45

# INFLUENZA (FLU) DATA IN RİZE PROVINCE

İlkay Bahçeci<sup>1</sup>, Songül Özyurt<sup>2</sup>, İlknur Esen Yıldız<sup>3</sup>

<sup>1</sup>Recep Tayyip Erdoğan University, Faculty of Medicine, Departman of Medical Microbiology/RİZE

<sup>2</sup>Recep Tayyip Erdoğan University, Faculty of Medicine, Departman of Pulmonary Diseases /RİZE

<sup>3</sup>Recep Tayyip Erdoğan University, Faculty of Medicine, Departman of Infection Diseases /RİZE

Goal: The influenza viruses classified in the Orthomyxo viridae family have three types, A, B, C according to the irantigenic properties. Influenza A virus can lead to epidemics as well as pandemics with different subtypes depending on hemagglutinin and neuraminidase glycoproteins. The influenza B virus, which is found in 2 different strains in circulation, is seen as a seasonal influenza agent. The influenza C virus is found in a singleline age in circulation and causes sporadic infections. Influenza viruses have been monitored by the World Health Organization (WHO) since 1952, due to their public health threat. Turkey has been launched in influenza surveillance activities to be carried out through the Ministry of Health in 2005 under the leadership of the Ankara Refik Saydam Hıfzısıhha Center National Reference Central Laboratory of Virology. Additionally 2015-2016 fluseason in Turkey Public Health Agency (THSK) severe acute respiratory infections (SARI) surveillance activities are also launched. In this study, it was aimed to determine the influenza data causing epidemics and loss of life in our country and in the world.

Method: In 2016, nasal swabs were taken from the patients with suspected SARI, who applied to hospitals in our center and districts with influenza-likesymptoms. In this context, nasal swab samples taken from the transport media distributed to hospitals in the region by the provincial health directo rate with in the scope of 2015-2016 influenza surveillance were sent to theInfluenza Reference Laboratory in the Ankara Refik Saydam Hıfzısıhha Center Microbiology Unit which operates with in the THSK in Virocult (Medical Wire Equipment CO, UK) viral transport medium. In the samples of SARI cases, 21 respiratory tract viruses with influenza were investigated by multiplex realtime PCR method in RotorGene 3000 (QIAGEN, Germany) using FTD Respiratory pathogens 21 (fast-tract DIAGNOSTICS, Luxembourg) kit.

Findings: In 2016, 276 samples with SARI were examined; 128 (46.3%) specimens were positive for influenza A and 117 (42.3%) were negative. 17 (6.4%) samples were identified as influenza B, while 14 (5%) samples were identified as Rhinovirus. 65 (50.7%) samples of influenza A patients were identified as influenza A (H1N1) pdm09 and 63 (49.3%) samples as influenza A H3N2. Seven patient whose identified as SARI were died.

DISCUSSION AND CONCLUSION:Influenza viruses cause a flu disease characterized by symptoms such as fever, inactivity, muscle pain, cough, sorethroat, and sudden onset. It is a disease that changes every year in terms of influenza factors and effects. Each year, the disease is caused by influenza-related illnesses that occur in 3-5 million people worldwide and result in death in 250-500 thousand people. In our region, influenza A (H1N1) pdm09 and influenza A H3N2 ratios were almost equal during the 2016 fluseason in our region. In addition to vaccination, surveillance studies in the region are also important. The detection of flu activation time is important to prevent out breaks. Moleculartypingwill be facilitated in thattheinfluenzavaccineto be administered in the following year will include identification genictypes. As a result, individuals who are at risk should be vaccinated; necessary measures should be taken to prevent outbreaks; A sample should be taken from every patient suspected of SARI and examined in terms of influenza and molecular typing should be done. Molecular typing is important in determininganti viral activity. Surveillance studies should be developed.

KeyWords: Influenza, acute respiratory infection, epidemic

#### SÖZEL 46

# THE EFFECT OF NUTRITION WITH PERCUTANEOUS ENDOSCOPIC GASTROSTOMY ON ANEMIA AND IRON PARAMETERS

#### Tugrul Kesicioglu

MD, Assist. Prof. Department of General Surgery, Giresun UniversityFaculty of Medicine

**Purpose:** Anemia is an important cause of morbidity and mortality in the geriatric patient group. In this study, we aimed to investigate the effect of percutaneous endoscopic gastrostomy (PEG) feeding on anemia and iron parameters

Materials and Methods: Patients who underwent PEG in last two years were screened. Among them, those who does not have anemia, those who received oral or intravenous iron therapy were excluded. A total of 52 patients were included in the study. Hemogram and iron parameters

were recorded at the time the patients underwent PEG and between 3-6 months after the patient underwent PEG.

**Results:** The mean age of the 52 patients studied was  $80.12 \pm 9.72$  years, 46.1% (n = 24) were females and 53.8% (n = 28) were males. When hemoglobin and iron parameters were compared before and after the date of PEG opening, a significant increase in hemogram was detected (Hb:  $10.18\pm1.24$ g/L before and Hb:  $10.824\pm1.72$ g/L after; p = 0.04). There was an increase in the amount of iron (Fe:  $28.19 \pm 20.24$ ug / dl before and Fe:  $48.36 \pm 58.84$  ug / dl after; p = 0.09) although not statistically significant. There was no significant change in total iron binding capacity (total iron binding capacity:  $182.19 \pm 92.41$  ug / dl before and total iron binding capacity  $192.57 \pm 74.38$  ug / dl after; p = 0.46).

**Result:** PEG feeding showed anemia correction effect in geriatric patient group.

**Keywords**: Percutaneous endoscopic gastrostomy, anemia, iron deficiency

#### SÖZEL 47

IMPAİRMENT OF ARTERİAL STİFFNESS AND MYOCARDİAL FUNCTIONS İN PATİENTS WİTH LİCHEN PLANUS

Dr. Öğr. Üyesi. <u>Deniz AKSU ARICA</u> <sup>1</sup>, Dr. Öğr. Üyesi. Leyla BAYKAL SELCUK <sup>1</sup>, Dr. Öğr. Üyesi. Mürsel ŞAHİN <sup>2</sup>

<sup>1</sup> Karadeniz Techinical University, School of Medicine, Department of Dermatology, Trabzon, Turkey

<sup>2</sup> Karadeniz Techinical University, School of Medicine, Department of Cardiology, Trabzon, Turkey

#### Abstract

**Background** 

Lichen Planus (LP) is a chronic inflammatory mucocutaneous disease. Recent studies showed that patients with LP have a higher prevalence of metabolic syndrome, dyslipidemia, hyperglycemia, and hypertension. Also chronic inflammation leads to endothelial dysfunction, which is an early step in the process of atherogenesis.

Arterial stiffness consists of chronic low-grade inflammation and damaged endothelial function, structural elements within the arterial wall, vascular smooth muscle tone and known as a risk factor for cardiovascular diseases. Arterial stiffness increasingly used in the clinical assessment of patients with inflammatory diseases.

**Objectives** 

The aim of this study is to evaluate arterial stiffness with the gold standart method, cardiovascular hemodynamics and associated inflammatory markers in LP patients with normal cardiac functions.

Methods

A total of 55 patients with a diagnosis of lichen planus with normal cardiac functions and 42 healthy controls were enrolled to the study. All patients underwent echocardiographic examination. Arterial stiffness measured with pulse wave velocity testing.

Results

There was no statistically significant difference in arterial stiffness between the patient and the control group, but arterial stiffness was significantly higher in patients with erosive lichen

planus compared to the control group and other lichen planus patients. (p = 0.006, p = 0.023). There was a moderate positive correlation between duration of disease and arterial stiffness (p=0.001).

Eroziv LP, disease duration, patient age, C-reactive protein (CRP) levels were evaluated as independent predictors on the arterial stiffness by linear regression analysis and especially increased disease duration and CRP level was shown to pose a risk for stiffness (Table 1).

Tablo 1. Linear regression analysis to determine the independent predictor of PVW in patients with LP

|                         | β     | P value |
|-------------------------|-------|---------|
| Disease duration (year) | 2,133 | 0,003   |
| Age                     | 0,028 | 0,071   |
| Erosive LP              | 0,916 | 0,195   |
| CRP (mg/dl)             | 1,501 | 0,014   |

#### Conclusion

In patients with erosive LP, arterial stiffness is significantly elevated and a positive correlation with the duration of the disease is observed, therefore especially patients with longer disease duration should be monitored carefully for cardiovascular risk.

## SÖZEL 48

# POST MENAPOZAL KADINLARDA METABOLİK SENDROMUN AŞIRI AKTİF MESANE SEMPTOMLARI ÜZERİNE ETKİSİ

# Mustafa Ozan HORSANALI\*, Eyüp DİL\*\*

\*T.C. Sağlık Bakanlığı Recep Tayyip Erdoğan Üniversitesi Eğitim ve Araştırma Hastanesi, Üroloji Kliniği Rize, Türkiye

\*\*Recep Tayyip Erdoğan Üniversitesi Tıp Fakültesi, Üroloji Anabilim Dalı, Rize, Türkiye

Amaç: Aşırı aktif mesane (AAM) nokturi,sik idrara çıkma ve urgency semptomları ile seyreden,kadınlarda erkeklere göre daha çok gözlenen bir sendromdur.Prevalansının yaş ile arttığı gösterilmiş olup,yeme-içme alışkanlığı,yaşlanma,obezite,pelvik taban kaslarında zayıflık ve östrojen eksikliğine sekonder vagen atrofisi gibi birçok faktör etyolojisinde yer almaktadır.Obezite bir halk sağlığı problemi olup etyolojisinde metabolik sendrom(MetS) suçlanmaktadır.Post-menopozal kadınlarda gelişen obezite ve AAM hastaların yaşam kalitesini etkilemekte,sosyal hayattan uzaklaşmalarına neden olmaktadır.Biz bu çalışmamızda aşırı aktif mesane semptomları ile üroloji polikliniğine başvuran post-menapozal kadınlarda MetS'un klinik semptomlar üzerine etkisini araştırmayı amaçladık.

Yöntem: Aşırı aktif mesane semptomları ile kliniğimize başvuran 120 postmenapozal kadın hasta çalışmaya dahil edildi. Nörolojik problemleri olan, östrojen tedavisi alan, geçirilmiş pelvik cerrahi öyküsü olan, radyoterapi ve/veya kemoterapi alan, idrar yolu enfeksiyonu olan, mesane işlevlerini bozacak herhangi bir ilaç alım öyküsü olan (antidepresan, antikolinerjik, vb.) hastalar çalışmadan çıkartıldı. Tüm hastaların antrapometrik verileri, ultrason ile ölçülen rezidü idrar hacimleri, AAM sorgu formu Türkçe validasyonu-8 anketi skorları ve laboratuvar bulguları kaydedildi. Hastalar International Diabetes Federation 2005 (IDF-2005) metabolik sendrom tanı

kriterlerine göre metabolik sendromu olmayan (Grup 1) ve metabolik sendromu olan (Grup 2) olmak üzere 2 grup ayrıldıktan sonra istatistiksel olarak incelendi.

Bulgular: Hastaların yaş ortalaması 62.37±12.05yıl, ortalama vücut kitle indeksi 32.2±6kg/m² idi. Ortalama HOMA-IR (homeostasis model assessment of insülin resistance) skoru 3.52±4.66 olarak hesaplandı. Ortalama rezidü idrar hacmi 39.16±33.30ml, ortalama aşırı AAM sorgu formu Türkçe validasyonu-8 skoru ise 23.38±5.55 puandı.105(%87.5) hasta sigara içmezken 15(%12.5) hasta sigara kullanmaktaydı. Hastaları alkol kullanmamaktaydı. Hastaların 25(%20.8)'inde tip 2 diabetes mellitus ve 72(%60)'sinde hipertansiyon mevcuttu. Her iki grupta 60 hasta mevcuttu(Tablo1). Gruplar arasında AAM sorgu formu Türkçe validasyonu-8 skorları, işeme sonrası atık idrar hacimleri, stres tip üriner inkontinans varlığı, sık idrar çıkma ve sıkışma tipi idrar kaçırma bakımından istatistiksel olarak anlamlı fark elde edildi (Tablo-1).

Sonuç: AAM semptomları hayati tehdit eden bir sağlık sorunu olmamasına rağmen birinci basmakta sık gözlenen, yaşam kalitesini bozan ve tedavi gerektiren bir durumdur. Bu durum postmenapozal kadınlarda sık görülen ve yaşla birlikte giderek artan bir sağlık sorunudur. Günümüzde AAM sendromunun etyolojisi tam bilinmemekte MetS ve komponenti olan insülin direnci bu konuda suçlanmaktadır. Çalışmamızda MetS'u olan hastalarda AAM semptomlarının hem stres hem de sıkışma tipi idrar kaçırmada izlendiğini gördük. İşeme sonrası artık idrar hacminin MetS olan hastalarda daha fazla olduğunu, fakat istatistiksel olarak anlamlı olmasına rağmen klinik olarak anlamlı bir artış olmadığını tesbit ettik. Sonuç olarak MetS AAM semptomlarını negatif etkilediğini ve hastaların yaşam kalitesini bozduğunu kanaatine vardık.

Tablo-1 Gruplar arasında klinik özeliklerin karşılaştırılması

|   | Grup 1      | Grup 2      | p      |
|---|-------------|-------------|--------|
|   |             |             | değeri |
| Yaş ortalama, std sapma                 | 60.40±12.31 | 64.35±11.55 | 0.071  |
| Aşırı aktif mesane sorgu formu Türkçe   | 21.32±8.50  | 25.43±8.17  | 0.008  |
| validasyonu-8 skoru ortalama, std sapma |             |             |        |
| Rezidü idrar hacmi ortalama, std sapma  | 31.83±30.04 | 46.48±35.01 | 0.015  |
| Stres tip üriner inkontinans n,%        | 18 (%30)    | 31 (%51.7)  | 0.016  |
| Sık idrara çıkma n,%                    | 54 (%90)    | 45 (%75)    | 0.031  |
| Sıkışma tipi idrar kaçırma n,%          | 40 (%66.7)  | 55 (%91.7)  | 0.001  |

#### SÖZEL 49

METABOLİK SENDROMUN ALT ÜRİNER SİSTEM SEMPTOMLARI VE YAŞAM KALİTESİ ÜZERİNE ETKİSİ

# Hüseyin EREN<sup>1</sup>

<sup>1</sup>Recep Tayyip Erdoğan Üniversitesi Tıp Fakültesi, Üroloji Anabilim Dalı, Rize, Türkiye

Amaç: Yaşlanan erkeklerde giderek artmakta olan alt üriner sistem semptomları (AÜSS) yaşam kalitesini bozan, gece-gündüz tuvalet ihtiyacı gerektiren ve buna bağlı düşmeler sonucu hayatı tehdit edebilen sosyal bir durumdur. Metabolik sendrom (MetS), günümüzde giderek artan sıklıkta görülen bir halk sağlığı sorunudur. Günümüzde yapılan son çalışmalarda MetS ile AÜSS

arasında ilişki olduğu bildirilmektedir.Altta yatan mekanizma net olmamakla birlikte MetS temelini oluşturan insülin direncinin AÜSS üzerine etkili olabileceği ileri sürülmektedir.Bu çalışmamızda MetS'un AÜSS üzerine etkisinin klinik sonuçlarını bildirmeyi amaçladık.

Yöntem:Kliniğimize son 1 yılda AÜSS ile başvuran 40 yaş üzerindeki erkek hastalar çalışmaya dahil edildi.Aktif üriner sistem enfeksiyonu,nörolojik hastalıklar,geçirilmiş üretral cerrahi,üretra darlığı öyküsü,pelvik radyoterapi öyküsü ve alt üriner sistem üzerine etkili medikal tedavi öyküsü alan hastalar çalışma dışında bırakıldı.Kalan 327 hastanın bilgileri toplandı.Hastaların antropometrik verileri,uluslararası prostat semptom skoru(IPSS) ve uluslararası erektil fonksiyon indeksi (IIEF-5) Türkçe validasyon skorları,prostat hacimleri,rezidü idrar hacimleri,maksimum işeme hızı (Q max) değeri,prostat spesifik antijen(PSA) değeri, lipid profilleri kaydedildi.Hastaların akut üriner retansiyon gelişmesi,cerrahi öyküsü ve takip süreleri kaydedildi.Hastalar International Diabetes Federation 2005 (IDF-2005) metabolik sendrom tanı kriterlerine göre MetS'u olmayan (Grup 1) ve MetS'u olan (Grup 2) olmak üzere 2 grup ayırıldı ve istatistiksel olarak incelendi.

Bulgular: Hastaların yaş ortalaması 61,19±9,27 yıl, ortalama vücut kitle indeksi 29±4,17kg/m², ortalama PSA değeri 1,8±1,3ng/mL,prostat hacmi 52,6±29,3mL,Q max:17,7±7,3mL/sn,rezidü idrar hacmi 59,5±101,5mL,IPSS skoru 15,1±7,7 ve IIEF-5 skoru 15,3±5,8 idi. Grup 1 de 135(%41,3),grup 2 de 192(%58,7) hasta mevcuttu. Hastaların 74(%22,6)'ü tip 2 diabetes mellitus ve 120(%36,7)'si hipertansiyon hastalığı nedeniyle tedavi almaktaydı. 103(%31,5) hasta aktif sigara kullanmaktaydı. Klinik özelliklerine gruplar arasındaki farklar tablo-1 de sunulmuştur. Grup 1 ile 2 arasında istatistiksel olarak prostat hacmi IPSS,IIEF-5,Q max,akut üriner retansiyon riski ve cerrahi girişim ihtiyacı bakımında anlamlı fark izlenirken, işeme sonrası atık idrar hacmi bakımından anlamlı fark saptanmadı.

Sonuç: AÜSS özellikle yaşlı hastalarda görülen obezite ve onun bir göstergesi olan MetS'un sıklıkla eşlik ettiği yaşam kalitesini bozan ve birinci basamak sağlık hizmetlerine sıkça müracaat edilen bir durumdur. Çalışmamızda AÜSS ile başvuran hastalarda MetS varlığının klinik şikayetleri arttırdığını, aynı zamanda bu durumun hastanın cinsel fonksiyonlarını da olumsuz etkilediğini, MetS'u olan hastaların medikal tedaviye yanıtlarının düştüğünü ve MetS'u olmayan hastalara göre daha fazla progresyon gösterip cerrahi tedavi ihtiyacı gösterdiklerini tesbit ettik. Çalışmamızın sonucu olarak MetS'u olan hastalarda AÜSS'nın daha ağır seyrettiğini ve yaşam kalitesini ciddi derecede bozulduğunu ve bu hastalara birinci basamaktan başlayarak daha agresif tedavi ve yakın takip yapılması gerektiğini gözlemledik.

Tablo-1 Grupların klinik özellik açısından karşılaştırılması

| Klinik özellik  | Grup 1<br>MetS (-) | <i>Grup 2 MetS</i> (+) | p değeri |
|---|--------------------|------------------------|----------|
| $Y$ aş ortalama $\pm$ standart sapma                        | 62,3±9,2           | 60,3±9,2               | 0,050    |
| $V\ddot{u}cut$ kitle indeksi ortalama $\pm$ standart sapma  | 27,7±3,9           | 29,8±4,1               | 0,001    |
| $PSA$ ortalama $\pm$ standart sapma                         | 1,9±2,4            | 1,8±2,1                | 0,079    |
| <b>Prostat Hacmi</b> ortalama $\pm$ standart sapma          | 48,8±27,9          | <i>55,3±30,07</i>      | 0,048    |
| $Q$ max ortalama $\pm$ standart sapma                       | 18,7±7,3           | 17,01±8,8              | 0,049    |
| $Rezid\ddot{u}$ idrar miktarı ortalama $\pm$ standart sapma | 62,9±144,4         | 57,08±54,11            | 0,651    |
| IPSS ortalama $\pm$ standart sapma                          | 13,7±4,2           | 16,1±7,9               | 0,005    |
| $\pmb{\textit{IIEF-5}}\ ortalama\ \pm\ standart\ sapma$     | 16,2±6,3           | 14,8±5,1               | 0,036    |
| Akut üriner retansiyon gelişimi n, %                        | 10(%7,4)           | 30(%15,6)              | 0,018    |
| Cerrahi girişim ihtiyacı n, %                               | 21(%15,6)          | 50(%26)                | 0,019    |
| Cerrahiye kadar geçen süre ortalama $\pm$ standart sapma    | 0,6±1,7            | 0,93±1,9               | 0,103    |

# DAMAGE CONTROL RESUSCITATION AND PERMISSIVE HYPOTENSION IN PATIENT WITH TRAUMATIC HEMORRHAGIC SHOCK

## Döndü Genç Moralar

Bakırköy Dr. Sadi Konuk Training and Research Hospital, Istanbul, TurkeyDepartment of Anesthesiology and Reanimation

#### Introduction:

When traumatic hemorrhagic shock patients arrive, initially implemented interventions have critical significance and impact on the rate of morbidity and mortality. We hereby aim to present our method that we implemented for our patient arriving with massive hemorrhage.

#### Case Presentation:

20-year-old male patient with 70 kg weight was taken to the operating room for hypovolemic shock and a puncture wound with a sharp pointed object in the left hemithorax region. Having a thoracostomy tube placement and 2000 ml of blood in the thoracal drainage, and intrathoracic hematoma being observed in the thorax tomography, he was taken to the operating room for emergency thoracotomy. Blood requests were made for the patient who had massive hemorrhage.

The patient had no known comorbidity, his mental state was confused, GCS: 15, Hemoglobine: 8.9 gr/dl, urine amount on entry was 100 ml. Monitorization was established, the left radial artery was cannulated. Double lumen endotracheal intubation was performed under general anesthesia and single lung ventilation was achieved. The left lung was deflated in order to perform laparotomy. Right internal jugular venous catheter was introduced, wide vascular access was obtained.

Perioperative 1000 ml crystalloid, 500 ml colloid fluid, erythrocyte suspension of 5 IU, thrombocyte suspension of 8 IU, fresh frozen plasma of 3 IU were introduced. Excessive crystalloid infusion was avoided in favor of damage control resuscitation (1:1:1).

Permissive hypotension was allowed. Trauma- induced coagulopathy was considered, coagulation tests and fibrinogen measurements were made. Transamine 1000 mg and Vit-K were applied.

2000 ml hematoma was drained by thoracic surgery, cauterization of intercostal vessels was performed. Rupture of the diaphragm was repaired by general surgery.

200 ml urine output came from the patient who had a total hemorrhagic loss of 4000 ml.

The postoperatively intubated patient was taken to the intensive care unit with TA: 127/69 mmHg, heart rate: 68/min, peripheric oxygen saturation: 100%; and he was transferred to the ward on the postoperative 1st day.

#### Discussion and Result:

With the implementation of damage control resuscitation and permissive hypotension in traumatic hemorrhagic shock patients, a higher rate of survival is reported in the literature and the application is recommended.

Avoidance of excessive crystalloid infusion prevents the dilution of coagulating factors and thrombocytes, while also sidestepping hypothermia-induced coagulopathy. Refraining from hypertension prevents excessive hemorrhaging and enhances effective coagulation by letting clot formation of the wound. This method was implemented to our patient as well and he was transferred to the ward successfully.

## SÖZEL 51

THE CLINICAL AND SOCIODEMOGRAPHIC CHARACTERISTICS OF CHILDREN WITH ATOPIC DERMATITIS AND THE FACTORS THAT MAY INFLUENCE THE DISEASE SEVERITY

## Leyla BAYKAL SELÇUK, Deniz AKSU ARICA

Dr. Öğr. Üyesi, Karadeniz Teknik Üniversitesi Tıp Fakültesi, Deri ve Zührevi Hastalıklar Anabilim Dalı, Trabzon\*\*

#### Objective:

Atopic dermatitis, is a chronic skin disease with inflammatory attacks that may be associated with diseases such as allergic rhinitis, conjunctivitis and asthma. The incidence of atopic dermatitis is 20% in children and 3% in adults.

In our study, we aimed to evaluate the clinical and sociodemographic characteristics of children with atopic dermatitis and the factors that may influence the disease severity

#### Method

Sixty children between the ages of 1-8 and their parents were included into this study. The sociodemographic characteristics of all of the patients and their parents, environmental factors, treatment and skin care applied by the parents were questioned. The severity of the disease was measured according to SCORAD (SCORing Atopic Dermatitis) index, and also sleep problems were investigated in all of the patients.

#### Results

The mean age of the patients was  $4.12 \pm 0.48$ . In 46.7% of the patients, the first site of involvement was the facial region. All patients had pruritus. Of the patients; 19 of them had pitriasis alba, 35 had dennie morgan lines, 13 had keratosis pilaris, 6 had keilitis, 8 had palmoplantar streaking, 38 had lichenification and 3 had prurigo nodularis lesions. 26.7% had mild disease, 60% had moderate, and 13.3% had severe disease. 63.3% of patients were using topical corticosteroids during the attack period and the mean duration of topical corticosteroid treatment was  $5.6 \pm 1.0$  days. While 26.7% of the patients used moisturizers regularly, 39.3% used moisturizers only when their complaints were increased, and 35% did not use moisturizers. The severity of the disease was significantly lower in patients who used moisturizers regularly (p: 0.04), but there was no significant difference between the patients who used moisturizers irregularly and who never used moisturizers. While 63.7% of the patients used oral antihistamine therapy, 37.3% did not use them. The most preferred group of antihistaminic was

cetirizine as non-sedating antihistamine. 41.7% of the patients had sleep disturbances. The disease severity and antihistamine use were found significantly higher in patients with sleep disturbances (p: 0,01, p: 0,04). There was no correlation between the frequency of bathing and the severity of the disease (p> 0.05). The disease severity was higher in patients with elevated total IgE levels (p: 0.007). The severity of the patients was significantly higher in patients with asthma (p: 0,02). The disease severity score was found higher in patients who delivered by cesarean section and in patients whose maternal age over 30, than in patients delivered vaginaly and whose maternal age was younger than 30, respectively (p: 0,015, p: 0,048).

#### Conclusion

In our study, it was shown that the severity of the disease was lower in patients with atopic dermatitis who used moisturizers regularly. In addition, we found that patients with severe disease had more sleep disturbances and antihistaminic use was higher in this group. Cesarean section and advanced maternal age might increase the risk for atopic dermatitis.

#### SÖZEL 52

# THE FREQUENCY OF HELICOBACTER PYLORI IN PATIENTS UNDERGOING GASTROSCOPY DUE TO DYSPEPTIC COMPLAINTS

## Hamza Çınar\*, Sercan Büyükakıncak\*\*

\*: Ordu University Faculty of Medicine, Department of General Surgery, Ordu

**Objective:** The aim of our study was to determine the frequency of Helicobacter pylori in patients undergoing upper gastrointestinal endoscopy and antrum biopsy due to dyspeptic complaints.

Method: The patients who had undergone upper endoscopy and taking antrum biopsy for dyspeptic complaints. The patients had retrospectively accessible data were included in the study between 2014 and 2018 years at Ordu University Medical Faculty Training and Research Hospital Endoscopy Unit.

**Results:** Of the 338 patients included in the study, 180 (53.3%) were male and 158 (46.7%) were female. In 118 (65.6%) of the male patients, Hp was positive and in 62 (34.6%) male patients, Hp was negative. 96 (60.8%) of the female patients, Hp was positive and in 62 (39.2%) of them Hp was negative. In all of the patients, 214 (63.3%) patients were Hp negative and 124 (36.7%) patients were Hp negative.

**Conclusion:** The prevalence of HP in our population is as high as 63.3%. Hp eradication is still important to prevent Hp-related diseases.

<sup>\*\*:</sup> Akçaabat Haçkalı Baba Public Hospital, Department Of General Surgery, Trabzon

IS IT NECESSARY TO SCREEN THYROID DYSFUNCTION IN PREGNANT WOMEN IN THE FIRST TRIMESTER?; THE RESULTS OF A CENTER IN THE BLACK SEA REGION

Deniz Kulaksız<sup>1</sup>, Şenol Ardıç<sup>2</sup>

- <sup>1</sup> University of Health Sciences, Trabzon Kanuni Education and Research Hospital, Obstetrics and Gynecology Department
- <sup>2</sup> University of Health Sciences, Trabzon Kanuni Education and Research Hospital, Emergency Department

Aim: In this study, we investigated the frequency of thyroid dysfunction in the first trimester pregnant women in our hospital and we investigated the necessity of thyroid function tests for our region.

Method: The results of fT4, fT3, and TSH in the first trimester pregnancies between the ages of 18-45 were applied retrospectively. 3082 patients were included in the study. 2.5 - 4.3 pg/mL for fT3, 0.57 - 1.24 ng/dL for fT4 and 0.34 - 5.6 mLU/mL for TSH were accepted as normal. Increased TSH levels and normal fT4 levels were defined as subclinical hypothyroidism in an asymptomatic patient. The presence of elevated TSH and low fT4 levels were defined as overt hypothyroidism. Low TSH and high fT4 levels were defined as clinical hyperthyroidism.

**Results:** The study findings were consistent with the results reported from Turkey. Over 18 of 3082 patients had overt hypothyroidism. 215 patients had subclinical hypothyroidism. Six patients had clinical hyperthyroidism. There were no patients with a high level of triiodothyronine, which was rarely seen as T3 toxicosis.

Conclusion: Thyroid diseases are a common health problem in our region as seen. When treatment is started early, it has an important role in the mental development of children. Thyrotoxicosis may occur in 1% of newborns in maternal thyrotoxicosis. Such fetal thyrotoxicosis usually responds to maternal thionamide therapy, but fetal deaths have been reported. However, isolated fT3 elevation is not common. Evaluation of the level of fT4 and TSH is important for our region.

**Keywords:** First trimester, Pregnancy, Thyroid function screening

# IS THERE A RELATIONSHIP BETWEEN ABORTUS IMMINENS AND COMPLETE BLOOD COUNT INFLAMMATION MARKERS?

# Kübra Baki Erin<sup>1</sup>, Yeşim Bayoğlu Tekin<sup>1</sup>, <u>Senol Ardıç<sup>2</sup></u>

<sup>1</sup> University of Health Sciences, Trabzon Kanuni Research and Training Hospital, Obstetrics and Gynecology Department

Aim: The aim was to evaluate whether the inflammatory parameters of complete blood count (CBC), including white blood cell (WBC), neutrophil-to-lymphocyte-ratio (NLR), platelet-to-lymphocyte-ratio (PLR), and mean platelet volume (MPV), had potential roles in the abortus imminens (AI).

Material And Method: A total of 200 patients who applied to Trabzon Kanuni Training and Research Hospital Emergency Department between July 2018 and August 2018 were included in the study. A total of 200 patients with the same characteristics who applied to the obstetrics outpatient clinic for any reason were taken as the control group. All patient files were examined and pregnant women with vaginal bleeding and fetal heart rate were detected by ultrasonography was included in the study. Exclusion criteria for all participants were systemic diseases, endocrinological and hematologic abnormalities, malignancy, presence of infectious disease, autoimmune diseases, use of glucocorticoids, smoking and alcohol use were also excluded. We recorded the demographic features of all patients. We also scanned the CBC Parameters of all the patients in the sample. WBC, neutrophil, lymphocyte, platelet, MPV levels and NLR and PLR were recorded. SPSS 23 was used for statistical analyses. A p value <0.05 was considered statistically significant. The distributions of data were evaluated by pearson correlation analysis were used for comparisons.

**Results:** The mean age of the AI group was  $26.19 \pm 6.43$ , BMI  $25.45 \pm 3.76$  m/kg², WBC  $8.90 \pm 1.76$ , PLT  $275.000 \pm 34.000$ , NEU  $4.19 \pm 1.38$ , LYM  $2.23 \pm 0.47$ , MPV  $9.62 \pm 0.75$ , NLR  $1.98 \pm 1.83$ , PLR  $123.14 \pm 29.70$ . The mean age of the control group was  $25.56 \pm 5.35$ , BMI  $26.12 \pm 2.87$  m/kg², WBC  $6.78 \pm 2.12$ , PLT  $286.000 \pm 29.000$ , NEU  $4.11 \pm 1.23$ , LYM  $2.33 \pm 0.54$ , MPV  $8.56 \pm 0.87$ , NLR  $2.01 \pm 1.79$ , 4 PLR  $119.21 \pm 27.78$ . While there was no difference between two groups for NEU, LYM, PLT, NLR, PLR, MPV, there was statistically significant difference between groups for WBC.

**Discussion:** AI is diagnosed as first trimester vaginal bleeding with closed cervix and confirmed with fetal heart rate on ultrasound. Evidences supports that inflammation is associated with abortions. We found an increase in WBC levels in patients with AI. Inflammation is thought to play a role in the etiology of AI. In this regard, further studies are needed to elucidate the potential role of pathogenesis of AI.

Keywords: Abortus imminens, white blood cell, inflammation markers

<sup>&</sup>lt;sup>2</sup> University of Health Sciences, Trabzon Kanuni Research and Training Hospital, Emergency Department

# Ebeveynler Çocukluk Çağı Aşılarını Neden Reddediyor?

Servet Aker<sup>1</sup>, Mustafa Kürşat Şahin<sup>2</sup>

1 Canik İlçe Sağlık Müdürlüğü - Samsun 2 Ondokuz Mayıs Üniversitesi Tıp Fakültesi Aile Hekimliği AD. - Samsun

**Amaç:** Bu çalışmada, çocukluk çağı aşılarının çocuklarına yapılmasını istemeyen ebeveynlerin aşılamayı reddetme nedenlerinin değerlendirilmesi amaçlanmıştır.

Yöntem: Tanımlayıcı tipteki bu çalışmada, Samsun Canik ilçesinde ikamet eden ve 01.01.2015-31.08.2018 tarihleri arasında çocukluk çağı aşılarını reddeden 43 aile değerlendirilmiştir. İlçede çocukluk çağı aşılarını reddeden 2015 yılında 6, 2016 yılında 11, 2017 yılında 16, 2018 yılı ilk sekiz ayında ise 10 aile bulunmaktadır. Aile hekimleri tarafından aşı reddi olarak İlçe Sağlık Müdürlüğü'ne bildirilen ailelerle tekrar iletişime geçilmiş ve ebeveynler yapılandırılmış bir görüşme formuyla değerlendirilmiştir. Değerlendirme kapsamında 33 anne 10 baba ile görüşülmüştür. Elde edilen veri yüzde olarak ifade edilmiştir.

Bulgular: Aşılanmayan çocukların %69,7'si erkektir. Çocukluk çağı aşılarını reddeden ailelerde, annelerin %48,8'i, babaların ise %65,1'i 30-39 yas aralığındadır. Annelerin, %32,5'i ortaokul, %30,2'si lise; babaların, %34,9'u lise, %32,6'sı üniversite mezunudur. Annelerin %72,1'i ev hanımı, babaların %90,7'si ücretli çalışandır. Annelerin tümü gebelik izlemlerini yaptırmış olup, bunların %30,2'si sadece aile sağlığı merkezinde takip edilmiştir. Annelerin %46,5'i gebelikleri esnasında tetanoz aşısı yaptırmış ve %55,8'i sezaryen ile doğum yapmıştır. Aşı olmayan çocukların %76,7'sinin kardeşi vardır. Kardeşi olan çocukların %15,2'sinin kardeşleri de çocukluk çağı aşılarını olmamış/tamamlamamıştır. Ebeveynlerin %81,4'ü "aşıların otizm ve benzeri hastalıklara neden olduğunu", %39,5'i "aşıların yan etkilerinin çok olduğunu", %32,6'sı "aşıların bağışıklık sistemine zarar verdiğini", %20,9'u "aşıların işe yaramadığını, faydasız olduğunu" düşünmektedir. Ebeveynlerin %13,9'u dini nedenlerle çocuklarını aşılatmadıklarını belirtmektedir. Ebeveynlerin %69,7'si bu bilgiyi sağlık personeli ya da üniversite hocasından aldıklarını ve %46,5'i bu bilgiye internetten ulaştıklarını belirtmektedir. Ebeveynlere "çocuğunuzu ya da sizi köpek ısırsa ve kuduz aşısı olmanız gerekse aşı olur musunuz?" diye sorulduğunda ebeveynlerin %6,9'u kendilerine %11,6'sı çocuklarına aşı yaptırmayacağını söylemektedir. Ebeveynlerin ASE'leri ile görüşülmüş ve her çocuk için ayrı değerlendirme yapması istenmiştir. Bu değerlendirmede ASE'ler, ebeveynlerin %18,6'sının hiçbir durumda çocukluk çağı aşılarını yaptırmaya ikna edilemeyeceğini ifade etmektedir.

**Sonuç:** Çocukluk çağı aşılarını reddeden ebeveynlerin sayısı giderek artmaktadır. Bu durumun oluşmasında, sorumsuzca hareket eden sağlık personelinin de katkısı büyüktür. Aşı redlerinin oluşmasında etkili olan faktörlerin tüm yönleriyle araştırılarak Sağlık Bakanlığı'nca acil eylem planının oluşturulması gerekmektedir.

Anahtar Kelimeler: Aşı, Aşı Reddi, Çocukluk Çağı Aşıları

IMPORTANCE OF THE KETEM(CANCER EARLY DİAGNOSİS,SCANNİNG AND TRAİNİNG CENTER) SCREENİNGS

Kamil PEHLİVANOĞLU, Genel Cerrahi Dr. Öğr. Üys, Erzincan Üniversitesi Hastanesi

Erhan ALTINTAŞ, Genel Cerrahi Asistan Doktor, Erzincan Üniversitesi Hastanesi

Purpose: In this report, we aimed to emphasize the importance of early diagnosis in the diagnosis of breast cancer and the benefits of screening by KETEM.

Method: Breast cancer is the second most common cancer in people after lung cancer. Breast cancer is the most common cancer and the most common cancer in cancer related deaths in women. When the 5-year survival rate is examined, it is between 80-83% in developed countries and this rate decreases to 53-60% in developing countries. Approximately 20-30% of the difference is a serious rate and this difference is caused by breast cancer screening in the developed countries that cause early detection and treatment of patients. In our country, breast cancer screening with KETEM scans are performed regularly and significant results are obtained. In light of this information, we examined the results of breast cancer screening performed by KETEM in our province of Erzincan in 2017

Results: A total of 5288 patients who were admitted to KETEM for breast cancer screening in 2017 are examined. 16(%0.3) of these patients were diagnosed with breast cancer. Among these patients 8 of them were classified as BIRADS 5 lesions, 4 of them were BIRADS 4 lesions and 4 of them were BRADS 0 lesions. The results of 4 patients could not be reached because patients chose another hospital for their operation and follow-up. Pathology results of 12 patients were examined. Invasive ductal carcinoma was detected in 11 patients and invasive lobular carcinoma was detected in 1 patient. Biopsy results of 3 patients were reached, however, the results of the pathology and the operation notes could not be reached. Of the remaining 9 patients, 4 patients underwent a modified radical mastectomy, 5 patients underwent segmental mastectomy-axillary dissection(Sentinel node was studied in 1 patient and underwent axillary dissection due to positive node). 2 patients were identified stage 1, 5 patients were identified stage 2 and 2 patients were identified stage 3.

Conclusion: Although the number of patients diagnosed with breast cancer was found to be as low as 0.3% as a result of Ketem scans, 7 patients were diagnosed early in stage 1-2 as a result of studies conducted in this group with no breast complaints and their treatment was started. Two more patients were diagnosed as advanced stage 3. If these patients were not screened, perhaps they would be diagnosed as stage 4 and completely lost their chance of surgery. For this reason, KETEM breast cancer screening should be performed in a very useful and effective way

Evaluation of risk factors in renal cell carcinoma patients

İlke Onur KAZAZ<sup>1</sup>, M.D., Fatih ÇOLAK<sup>1</sup>, M.D. Arif Burak ÇEKİÇ<sup>2</sup>, MD

<sup>1</sup>Karadeniz Teknik University School of Medicine Department of Urology, Trabzon

#### **AIM**

We aimed to present the risk factors (body-mass index, smoking, obesity, hypertension) related to renal cell carcinoma (rcc) in a group of patients with a histopathological diagnosis of rcc.

#### **METHOD**

A group of 239 patients in a 10-year period who underwent radical nephrectomy was evaluated. Age distribution was found to be between 25 and 85 years. The group was consisting of 76 female and 163 male subjects. Body-mass index (BMI) values and the presence of smoking, obesity and hypertension were recorded. Statistical analysis to reveal any relationship was done.

#### **RESULTS**

There were 4 patients in their twenties, 10 patients in their thirties. Smoking was found in 44% of the cases (in 17% of female and in 56% of male patients). The frequency of smoking was found to be higher in males (p<0,001). Obesity was found in 27% of the cases (in 37% of female and in 22% of male patients). The frequency of obesity was found to be higher in females (p<0,03). Hypertension was recorded in 48% of patients without a difference for sex (p=0,16 for sex distribution).

#### **CONCLUSION**

Smoking and obesity, which are proved risk factors for rcc, have to be treated in the light of their sex distribution. It has to be emphasized that rcc may be found in younger ages such as twenties.

Keywords: Renal Cell Carcinoma; Obesity; Smoking; Hypertension

<sup>&</sup>lt;sup>2</sup> Karadeniz Teknik University School of Medicine Department of General Surgery, Trabzon

Evaluation of Childhood Suicide Deaths in Turkey
Dr.Burak GÜMÜŞ
Hitit University Faculty of Medicine Department of Forensic Medicine.

## Dr.İsmail TOPAL

Erzincan University Faculty of Medicine, Department of Pediatrics

Aim: Suicide is the deliberate act of ending one's own life. Suicides are a major public and mental health concern in developed and developing countries today. Every year, 800,000 people die from suicide and suicide deaths account for 1.4% of all deaths. Childhood suicides include suicide deaths under the age of 15. In this study we aimed to present the incidence of childhood suicide deaths that occurred in Tuekey between 2002 and 2017, suicide methods and the reasons which lead to suicide and compare with similar literature carried out.

Materials and Methods: We obtained our data, which cover the years 2002 to 2017, from the database accessible at the official website of the Turkish Statistical Institute. This organization allows the use of its data for research purposes.

Finding: 1397 children under 15 years of age died as a result of suicide between 2002 and 2017. Between 2007 and 2017, the incidence of suicide varied between 0.5 and 1 per hundred thousand, compared to the 5-14 age group. 54% of suicidal deaths under the age of 15 between 2002 and 2017 were observed in girls and 46% in men. Hanging is the most used suicide method in both girls and boys. The most likely cause of death in known suicide deaths is family incompatibility for both sexes.

Result: It is known that childhood suicide deaths are rare and the sharpest increase in suicide deaths occur between early adolescence and young adulthood. The incidence of suicide among 5-14 age group in our country varies between 0.5 and 1 per hundred thousand. In the literature researches that were carried out, it was determined that the most common method in childhood suicides was hanging. In our study, we also found, in a similar way to the literature, that childhood suicide deaths were most frequently carried out by means of hanging. We think that why suicide deaths under the age of 15 in Turkey occur more in girls is that they enter puberty earlier. In general, intense internal and external changes occur during the transition to late childhood early adolescence and physical, emotional, and mental capacities are affected during these changes. Causes of many of childhood suicide deaths in Turkey haven't been detected. The most common cause of known suicide deaths is family incompatibility. We think that the main reason for this is that the individuals in this age group live dependent on their families.

# SEROPREVALENCE OF HBSAG, ANTI-HBS-AND ANTI-HCV AMONG PREGNANT WOMEN RESIDING IN RIZE PROVINCE, TURKEY

# Sabri Colak <sup>1</sup>

<sup>1</sup>Department of Obstetrics and Gynecology, Recep Tayyip Erdogan University School of Medicine, Rize

#### Introduction

The proportion of infection in babies born from hepatitis B early antigen positive mothers is 60-90% and if they are not treated, more than 90% of them will be chronic hepatitis B carriers and this brings the risk for chronic hepatitis and hepatocellular cancer.

We tried to find out the proportion of the pregnant women with HBsAg (surface antigen of hepatitis B), anti-HBs (antibody against hepatitis B surface antigen) and anti-HCV (antibody of hepatitis C)

In this study, 2385 pregnant women are evaluated retrospectively for HBsAg, anti-HBs and anti-HCV in University Hospital, Clinics of Obstetrics and Gynecology between 2015-2017.

#### Materials and Methods

Pregnant women with HBsAg, Anti-HBs and anti-HCV are followed up in Department of Obstetrics and Gynecology, Medical Faculty of Rize Recep Tayyip Erdogan University. Serological tests were studied using macro-ELISA. Data for statistical evaluations were transferred to the computer in SPSS 18 statistical package program and frequency, percentage, mean standard deviations were calculated in statistical analyzes.

#### Results

The mean age is found as  $27.45 \pm 5.42$  and gestational age is found as  $10.18 \pm 1.2$  In the study group, 87 of the pregnant women (3.65%) HBsAg positive, 621 of them (26.04%) anti-HBs positive and 18 of them (0.75%) are found to be anti-HCV positive. The findings of our study are correlated with the results of other studies in Turkey.

#### Discussion

It has been necessary to make serological tests for hepatitis B routinely for protection and treatment of the newborns. All of the pregnant women and newborn parents should be informed. Also, after the screening tests for hepatitis B, vaccination should be done before the conception. Our country has been involved in the vaccination program since1988. Despite the low percentage of spread, the screening of hepatitis C infection in risk groups is important for community and newborn health. The results of our study is correlated with the statistics of the studies of our country. Hence, we suggest screening all pregnant women who have risk factors for hepatitis B and hepatitis C for the protection of newborns.

#### **Keywords**

Hepatitis B, hepatitis C, pregnant women

Evaluation of the extended spectrum beta-lactamase resistance in uropathogens

# Hamit Zafer Aksoy<sup>1</sup>

<sup>1</sup> University of Health Sciences, Kanuni SUAM, Department of Urology, Trabzon, Turkey

#### Aim

Urinary tract infection is very common and the most frequently isolated bacteria are Enterobactericeae spp. bacteria. Extended spectrum beta-lactamase (ESBL)-producing uropathogens have started to be identified at high rates in community-acquired infections as well as nosocomial infections. Chronic disease, prior antibiotic use, advanced age, hospitalization, urolithiasis, urinary catheter use, recurrent urinary tract infection are known risk factors for ESBL production. This condition limits the use of oral antibiotics and the increased resistance rates have a negative impact on mortality and morbidity.

The aim of this study was to evaluate the ESBL resistance of uropathogens in patients admitted to urology outpatient clinic.

#### Method

The study included patients with urinary tract infection findings who were admitted to the outpatient clinic and sent to urine culture during a six-month period. ESBL rates in uropathogens isolated from urine cultures were evaluated.

#### Results

In a six-month period,506 of 3395 patients who received urine culture had urine culture reproduction. 67.8% (n: 343) of the patients with urine culture reproduction were female and 32.2% (n: 163) were male. 20.9% (n: 106) of the reproduction of urine culture was gram positive bacteria and 79.1% (n: 400) of the reproduction of urine culture was gram negative, Enterobactericeae spp. The ESBL positivity rates were 23% (n: 92).

## Conclusion

Antibiotic resistance profiles of uropathogens may vary regionally. Considering the various risk factors of ESBL production, antibiotics should be recommended and ESBL should be kept in mind in patients with a history of repeated antibiotic use. According to the results of urine culture, treatment should be regulated and rational use of antibiotics should be given importance.

The evaluation of adult vaccination practices Firdevs Aksoy, <u>Murat Aydın</u>, İftihar Köksal

Karadeniz Technical University Medical Faculty, Department of Infectious Diseases and Clinical Microbiology, TRABZON, TURKEY

#### Introduction

Adults are motivated to get immunization. Because vaccines aren't just for children. But many adults believe it will protect them from diseases that could lead to serious conditions. In our study, vaccinations in adults were evaluated in our clinic.

#### Material-method

The adults who came to our vaccination clinic between 01.01.2016-30.09.2018 were evaluated in our study.

#### Results

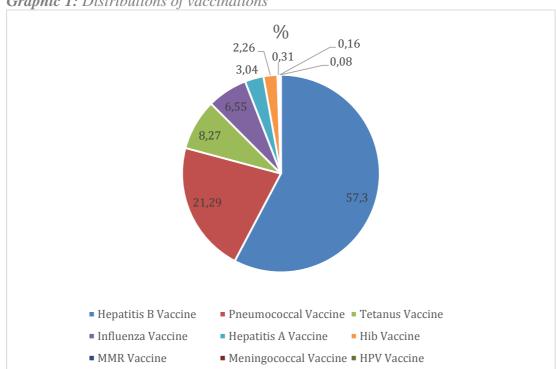
The number of admissions to our vaccination clinic were 1282. Six hundred sixty eight (52,11%) cases enrolled were women and 614 (47,89%) ranged were men. The average age was 40,20 ( $\pm 16.9$ ) and median value was 36,5. The average age was 39,10 ( $\pm 17.2$ ) for women and 41,40 ( $\pm 16.7$ ) for men. Healthy individuals were 46.1% of the total cases. People with comorbidity were 53,9% of the total cases. The most common comorbidity was receiving immunosuppressive therapy. Comorbidities are shown in Table 1. The most administered vaccine was Hepatitis B vaccine (58,03%). Distributions of the vaccines are shown in graphic 1.

## Conclusion

Vaccination rates of patients with healthy individuals and comorbid factors should be increased. Many adults don't know they are vulnerable to vaccine-preventable diseases. Adults have probably not known all the vaccines they need. They will need to their healthcare providers recommendations. People should be informed and vaccination rates should be increased.

**Table 1:** Distributions of comorbidites

| Comorbidities             | n (%)       |  |
|---------------------------|-------------|--|
| Immunosuppressive therapy | 221(31,98)  |  |
| Diabetes mellitus         | 93 (%13,46) |  |
| Splenectomy               | 82 (%11,87) |  |
| Renal failure             | 52 (%7,52)  |  |
| Injury                    | 46 (%6,66)  |  |
| Organ transplantation     | 31 (%4,49)  |  |
| HIV                       | 29 (%4,20)  |  |
| Hematological malignancy  | 15 (%2,17)  |  |
| Cardiovascular disease    | 10 (%1,45)  |  |
| Solid organ malignancy    | 8 (%1,16)   |  |
| Others                    | 75 (%10,85) |  |



**Graphic 1:** Distributions of vaccinations

#### SÖZEL 62

# INVESTIGATION OF ELECTROENSEFALOGRAPHIES OF CHILDS WITH FEBRILE **SEIZURE**

## Tülay Kamaşak

## Karadeniz Technical University Faculty of Medicine Department of Pediatric Neurology

Objective: Febrile seizures are a common health problem in childhood. They often appear as simple febrile seizures. It is well known that electroencephalography (EEG) is unnecessary for simple febrile seizures, especially for the first seizure. Sometimes the family's worries and the fact that the complicated noncomplex separation of the seizure is not clear lead the physician to evaluate the patient with EEG. Multiple febrile seizures may also be the reason for evaluation of EEG

Methods: The patients aged between 1-5 years who were seen due to febrile seizures between 2015-2017 in Karadeniz Technical University Medical Faculty were retrospectively analyzed. Seizure counts, seizure types, family histories and EEG records of these patients were retrospectively investigated. Patients with underlying neurological diseases or congenital brain developmental problems were excluded.

<sup>\*</sup>Haemophilus influenzae type B vaccine, \*\*Measles, Mumps, Rubella vaccine, \*\*\*Human papillomavirus vaccine

Results: EEG were not performed in 27 of 127 patients due to the first simple febrile seizure. Of the remaining 100 patients, 22 had a first seizure, 35 had a second seizure, and 43 had seizures of three or more. Three patients had an EEG disorder. All of these patients had complicated seizures and two had a family history of epilepsy. One patient's generalized epileptic disorder was detected in two patients with focal epileptiform disorder. EEG was reported as suspicious in five patients and control EEGs were normal. 27 patients who had no EEG were retrospectively screened and had no additional problems to apply to the Neurology Clinic.

Conclusion: EEG is an indispensable diagnostic tool for epilepsy. Although EEG in simple febrile seizures is unnecessary, in some cases EEG and even EEG monitoring of patients may be necessary. Therefore, the first evaluation of patients with febrile seizures is of great importance

#### SÖZEL 63

Viewpoints and Knowledge of Family Physicians in Rize about Nutritional treatment of Home Health Care Patients: A Survey Study

# Hızır Kazdal<sup>1</sup>

<sup>1</sup>Recep Tayyip Erdogan University Medical Faculty, Department of Anesthesiology and Reanimation

Aim: This study aimed to collect and assess the viewpoints of family physicians in Rize about nutritional treatment of home health care patients.

Methods: A questionnaire containing open-ended, multiple choice, and closed questions was asked to all family physicians working in Rize (n = 94). Questionnaires filled by > 66% were included in the final analysis.

Results: Most of the participants were 36-50 years of age (51, %64) and men (56, %70). The work experience was mostly above 10 years (62, %78). The questionnaire is given in the appendix A. Open-ended questions (no. 5,7,9,10,14,20,21) were answered by none of the participants. Results of the rest are given in Tables 1-4.

Age and gender had no effect on the frequency of the answers (p > 0.05 in all cases).

Majority of the correspondents preferred either home food or enteral nutrition instead of parenteral nutrition (80% vs 20%, p = 0.028). There appears to be a disunion about the choice of flavoured or non-flavoured preparations, with both parties arguing the opposite about the importance of taste sensation.

Family physicians with least work experience preferred route of feeding when considering an enteral preparation (94% vs 72%, p = 0.038).

None of the family physicians with less than 10 years of work experience choose percutaneous endoscopic gastrostomy as a route of feeding.

Less than half of the family physicians with less than 10 years of work experience choose the correct answer when asked about how to determine that PEG is sufficiently tight-sitting (46% vs 67%, p < 0.001).

Discussion: The wide distribution of the answers to all questions shows that the knowledge of family physicians is not standard. Since no open-ended question was answered, we are in opinion that the main reason is lack of knowledge. This study showed that knowledge about percutaneous feeding routes are lacking in family physicians with work experience of less than 10 years.

The facts that continuous infusion is seen as the safest method in terms of aspiration is in accordance with elevation of head of bed to 30-45 degrees being the most adopted technique. This, however, reflects a continuum of intensive care pactices at home health care.

The wide distribution of the answers to as when to stop enteral nutrition, where the answer should be 'all', clearly states the lack of knowledge in this aspect.

We are in opinion that regular training about home health care nutrition should be instituted.

Table 1. Frequencies of the answers to the questionnaire.

| Question  | # of       |
|---|------------|
|   | responders |
| Your definition of "Weight loss requiring intervention"                       |            |
| > 5% weight loss within last 6 month  | 5          |
| > 10% weight loss within last 6 month   | 56         |
| Any weight loss within last 6 month   | 7          |
| $BMI < 25 m^2/kg$   | 9          |
| No answer   | 3          |
| Your choice of nutrition in a malnourished patient (multiple choices allowed) |            |
| A. Home food  | 24         |
| B. Enteral nutrition  | 19         |
| C. Parenteral nutrition   | 3          |
| A + B   | 21         |
| A + C   | 1          |
| B+C   | 4          |
| All   | 8          |

BMI: Body mass index

Table 2. Enteral nutrition

| Table 2. Enteral nutrition  Ouestion   | # of          |
|--|---------------|
| Question   | responders    |
| Your choice of enteral nutrition in a patient who is able to swallow fluids only | . esperierers |
| Home food  | 60            |
| *Because it is natural   | 14            |
| *Because it is cheaper   | 12            |
| Commercial oral nutrition preparations   | 14            |
| *Because they have high quality proteins   | 5             |
| *Because they are easier to prepare  | 4             |
| Both   | 5             |
| No answer  | 1             |
| Your choice in enteral tube feeding  |               |
| Flavoured preparations   | 41            |
| *Because they are more easily tolerated by the patient                           | 3             |
| *Because they stimulate taste sensation  | 24            |
| Non-flavoured preparations   | 35            |
| *Because they are cheaper  | 1             |
| *Because most patients have no taste sensation                                   | 12            |
| Both   | 1             |
| No answer  | 3             |
| Most important factors you consider when choosing an enteral nutrient? (multiple |               |
| choices allowed)   | 10            |
| A. Patient's medical history   | 2             |
| B. Patient's hydration status  | 3             |
| C. Cost of the preparation   | 24            |
| D. Route of feeding  | 3             |
| A + C  | 5             |
| A + D  | 2             |
| B + D  | 2             |
| A + B + D  | 7             |
| A + C + D  | 20            |
| All  |               |
| Which of these preparations do you regularly include in enteral nutrition?       |               |
| (multiple choices allowed)   |               |
| A. Vitamines   | 7             |
| B. Trace elements  | 1             |
| C. Probiotics  | 15            |
| D. None  | 44            |
| A + B  | 4             |
| A + C  | 3             |
| All  | 6             |

*Table 3. Risk of aspiration during enteral feeding.* 

| Tuble 3. Risk of dispiration during emeral feeding.                              |     |
|--|-----|
| Your preference to decrease risk of aspiration during enteral feeding? (multiple |     |
| choice)  | 25  |
| Continuous infusion  | 13  |
| Intermittent bolus feeding   | 5   |
| I don't think there is any difference  | 27  |
| I have no idea/knowledge   |     |
| Which techniques/drugs do you use o decrease risk of aspiration during enteral   |     |
| feeding? (multiple choices allowed)  |     |
| A. Head of bed elevated to 30-45 degrees   | 35  |
| B. Post-pyloric tubes  | 1   |
| C. PEG/PEJ   | 4   |
| D. Gastrokinetic agents  | -   |
| E. Consultation  | 6   |
| A + C  | 8   |
| A + E  | 9   |
| A + B + C  | 3   |
| When do you stop enteral nutrition? (multiple choices allowed)                   |     |
| A. Mechanical obstruction  | 7   |
| B. Hemodynamic insult  | 1   |
| C. Intestinal perforation  | 8   |
| D. High-output duodenal fistula  | 1   |
| E. Comatose patient  | 3   |
| A+C  | 7   |
| C+D  | 3   |
| A + C + D  | 14  |
| A + C + E  | 5   |
| A + B + C + D  | 8   |
| A + C + D + E  | 4   |
| All  | 10  |
|  | l . |

PEG: Percutaneous endoscopic gastrostomy; PEJ: Percutaneous endoscopic jejunostomy

Table 4. Nasogastric tube feeding

| Question   | # of       |
|--|------------|
|  | responders |
| Which one do you prefer most? (Multiple choice)                              |            |
| Nasogastric tube   | 58         |
| Nasojejunal tube   | 1          |
| Nasoduodenal tube  | 2          |
| PEG  | 7          |
| Nasogastric tube + PEG   | 7          |
| How would you check the position of nasogastric tube during a home visit?    |            |
| Push air into stomach with gavage feeding syringe and listen with stetoscope | 33         |
| Checking gastric residual volume with gavage feeding syringe                 | 8          |
| Checking marks on the nasogastric tube                                       | 4          |

PEG: Percutaneous endoscopic gastrostomy

Table 5. PEG-related questions

| Question   | # of       |
|--|------------|
|  | responders |
| How would you determine that PEG is sufficiently tight-sitting   |            |
| It should not move   | 9          |
| It should be able to freely rotate around its axis               | 11         |
| It should be able to rotate around its axis with some resistance | 35         |
| Would you prefer a pull-type PEG?                                |            |
| Yes  | 35         |
| No   | 37         |
| No answer  | 8          |
| When should a PEG be changed? (multiple choices allowed)         |            |
| A. Clogged   | 9          |
| B. Infected  | 9          |
| C. 6 months later  | 3          |
| D. 1 year later  | 2          |
| E. I have no idea/knowledge                                      | 24         |
| A + B  | 14         |
| A + C  | 2          |
| B+C  | 1          |
| A + B + C  | 5          |
| A + B + D  | 3          |

PEG: Percutaneous endoscopic gastrostomy

# YOĞUN BAKIM ÜNİTESİNDE YATAN HASTALARIN KAN, İDRAR VE TRAKEAL ASPİRAT KÜLTÜRLERİNİN DEĞERLENDİRİLMESİ

# Yrd. Doç. Dr. Sibel Gökçek /Beykent Üniversitesi/İstanbul Medicine Hospital YBÜ

AMAÇ: Yoğun bakım üniteleri (YBÜ), hastane kökenli enfeksiyonların en sık görüldüğü ve mortalitesinin en fazla olduğu bölümlerdir. Mekanik ventilasyon, trakeostomi, kateter uygulanması gibi invaziv girişimler ve geniş spektrumlu antibiyotik kullanımı, YBÜ'sinde dirençli patojenlerin ortaya çıkmasının önemli nedenlerindendir. Bu çalışmada, hastanemiz YBÜ'sinde entübe ve ekstübe olguların kan,idrar ve trakeal aspirat kültürlerinde üreyen mikroorganizmaların oranlarını karşılaştırmak.

MATERYAL-METHOD: Kliniğimizde 2018 ocak-2018 haziran arası 7 gün ve üzeri interne edilmiş olan olgulardan kan,idrar ve trakeal aspirat kültürü alındı.

- Kan kültürü sonucunu MRSA, MRSE, stafa aureus, staf epidermidis ve üreme olmayan olgular olarak değerlendirildi.
- İdrar kültürü sonucunda ise E.coli, klebsiella pnömonie, pseudomonas aeroginosa ve üreme olmayanlar olarak değerlendirildi.
- Trakeal aspirat kültüründe kelpsialla pnömonie, pseudomonas aeroginosa, proteus spp ve üreme olmayanlar olarak değerlendirildi.

Entübe hastalar grup 1, ekstübe hastalar grup 2 olarak kabul edildi.

#### **BULGULAR:**

Grup 1 in (Entübe) – yaş aralığında ortalama 70.90, grup 2 nin (Extübe) – yaş aralığında ortalama 70.95,di. Grup 1 'in %49,01'i kadın, % 50,98 'i erkek, grup 2 'nin %54,09'u kadın, % 45,90'ı erkekti.

Kan kültüründe grup 1 deki olgularda; MRSA % 12,72, MRSE %9,09, Difteroid Basil %1,81, Staf. Aureus %5,45, diğer mikroorganizmalar %9,09, üreme olmayanlar% 61,81, Grup 2 de ise, MRSA %14,03, MRSE % 7,01, Staf. Aureus %7,01, Difteroid basil %3,5, diğer mikroorganizmalar % 19,26 üreme olmayanlar %49,12 olarak saptandı.

İdrar kültüründe Grup 1 deki olgularda; E.coli,%3,6 candida %3,6, klebsiella pnömonie %5,45, pseudomonas aeroginosa %7,84,diğer mikroorganizmalar %5,88, üreme olmayanlar %72,54 olarak saptandı. Aynı şekilde Grup 2 de ise; E.coli %14, klebsiella pnömonie %1,pseudomonas %0, üreme olmayanlar %80 olarak saptandı.

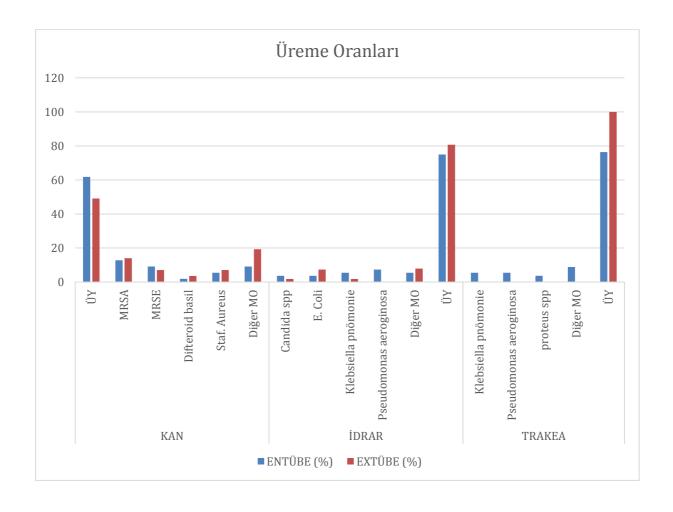
Trekeada Grup 1 deki olgularda klebsiella pnömonie %5,5, pseudomonas aeroginosa %5,6, proteus spp %3,4, diğer mikroorganizmalar %9, üreme olmayanlar %76,5, Grup 2 de ise ,Trekal aspirat kültürü alınmamıştır.

#### TARTISMA:

Yoğun bakım ünitelerinde yatan hastalarda enfeksiyonların görülme sıklığı ve şiddeti diğer servislere göre beş on kat daha fazladır. Bu durum yüksek mortalite ve morbiditeye neden olmaktadır.

Tespit ettiğimiz bu sonuçlarla etkin enfeksiyon kontrol önlemlerinin alınması ve bunların ciddi bir şekilde takip edilmesinin gerekliliği önem arz etmektedir.

|        | MO                  | ENTÜBE (%) | EXTÜBE (%) |
|--------|---------------------|------------|------------|
|        | ÜY                  | 61,81      | 49,12      |
|        | MRSA                | 12,72      | 14,03      |
| KAN    | MRSE                | 9,09       | 7,01       |
| N      | Difteroid basil     | 1,81       | 3,5        |
|        | Staf. Aureus        | 5,45       | 7,01       |
|        | Diğer MO            | 9,09       | 19,26      |
|        | Candida spp         | 3,6        | 1,75       |
|        | E. Coli             | 3,6        | 7,27       |
| İ      | Klebsiella pnömonie | 5,45       | 1,75       |
| İDRAR  | Pseudomonas         | 7,27       | 0          |
| R      | aeroginosa          | · ·        |            |
|        | Diğer MO            | 5,45       | 7,88       |
|        | ÜY                  | 75,01      | 80,7       |
|        | Klebsiella pnömonie | 5,45       | 0          |
| 71     | Pseudomonas         |            |            |
| RA     | aeroginosa          | 5,45       | 0          |
| TRAKEA | proteus spp         | 3,63       | 0          |
| Ä      | Diğer MO            | 8,77       | 0          |
|        | ÜY                  | 76,36      | 100        |



RESULTS OF COLONOSCOPY IN PATIENTS WITH FECAL OCCULT BLOOD TEST POSITIVITY FOR COLORECTAL CANCER SCREENING USED BY FAMILY PRACTITIONER IN ERZÎNCAN REGION

Orhan ÇİMEN, Dr. Öğretim Üyesi, Erzincan Binali Yıldırım Üniversitesi Mengücek Gazi Eğitim ve Araştırma Hastanesi Genel Cerrahi Anabilim Dalı, Erzincan

Ferda KESKİN ÇİMEN, Dr. Öğretim Üyesi, Erzincan Binali Yıldırım Üniversitesi Mengücek Gazi Eğitim ve Araştırma Hastanesi Tıbbi Patoloji Anabilim Dalı, Erzincan

<u>Arif Burak ÇEKİC</u>, Dr. Öğretim Üyesi, Karadeniz Teknik Üniversitesi Tıp Fakültesi Genel Cerrahi Anabilim Dalı, Trabzon

AIM: Colorectal cancer(CRC) is the second most commonly diagnosed cancer in women and third common cancer in men across worldwide. In early diagnosed localised CRC, 5-year survival rate is about 90%. Annual fecal occult blood test is an unexpensive and noninvasive screening method for CRC. Our aim in this study to determine the sensitivity of fecal occult blood test(FOBT) in Erzincan region.

MATERIALS AND METHODS: A total of sixty patients, whom fecal occult blood tests were positive and referred by family practitioners to perform colonoscopy, between 01.01.2018-31.08.2018 were included in this study. Patients' demographic data, colonoscopy and pathology results evaluated retrospectively.

RESULTS: Forty(66%) patients were female and 20(33%) patients were male. Mean age of all patients' was 56.9 years. Seventeen(28%) patients had lesions in colonoscopy which requires pathological examination. Four of these seventeen patients had non-spesific colitis. Other lesions in colonoscopy were colonic polyps. In pathological evaluation of these polyps, 5(8%) were adenomatous polyps, 4(6%) were hyperplastic polyps, 1(2%) was low grade dysplasia, 1(2%) was tubular adenoma, 1(2%) was tubulovillous adenoma and 1(2%) was mixed type polyp, respectively.

CONCLUSION: Although none of the 60 patients had colorectal cancer in our study, FOBT detected various lesions that may cause gastrointestinal haemorrhage or malignant transformation in 28% of patients. In conclusion, it was thought that FOBT was successfully used in CRC screening by family practitioners in our region.

Treatment of a symptomatic retrosternal goitre with a family history of RAI ablated differentiated thyroid carcinoma

Demet SENGUL, MD, Assist. Prof.<sup>1, a</sup> <u>Tuncer OZTURK</u>, MD, Assist. Prof.<sup>2, b, \*</sup>

Introduction: Retrosternal goitre (RSG) is defined as a thyroid mass that extends 3 or more centimetres below the suprasternal notch when the neck is hyperextended. Retrosternal extension can occur in 1–20% of goitres, depending on the chosen definition. RSG are usually benign in nature, although an underlying lymphoma or other neoplastic process may be found in up to 20% of cases. Surgical approach is indicated while the disease became or already symptomatic. Thyroidectomy is the gold standard curative treatment which prevents potentially fatal compressive symptoms.

Case report: A 67-year-old female patient was admitted to our clinic in September 2017 with the complaints of difficulty in swallowing, shortness of breath, and hoarseness. Her medical history includes diabetes mellitus, hypertension, hyperlipidemia, atrial fibrillation and familial mediterranean fever. There was no history of radiation exposure in her first two decades. His family history revealed a total thyroidectomy with radioactive iodine ablation of her older sister due to the differentiated thyroid carcinoma. She had a previous thyroid fine-needle aspiration cytology with Bethedsa Category II, erformed in January 2017. She was in a euthyroid status. The neck ultrasonography exposed multinodular goitre, possessing the largest nodule, an hyperechoic solid nodule with well demarcated hypoechoic halo, 26 mm in a diameter, in left lobe inferior. Her neck MRI revealed multinodular goitre with the largest nodule, 20 mm in a diameter, in left lobe inferior and left lobe, expanding retrosternally. The thorax MRI put forward the left lobe was descending to the brachiocephalic vein and the trachea was mildly deplased to the right. She underwent to surgery, by the indicaton of a symptomatic RSG. A total thyroidectomy with intermittant intraoperative nerve monitorization (IIONM) was performed by cervical approach without sternotomy (Figure 1). Macroscopically, three colloid rich nodules, 24x20x20 mm at rigt and one colloid rich nodule, 38x26x24 mm at left. Microscopically, Hashimoto's thyroiditis, adenomatous hyperplasia, and two reactive lymph nodes with immunohistochemistry, HBME-1, CK19, Galectin-3.

Conclusion: RSG may lead to potentially fatal compressive symptoms while not treated surgically. A surgical treatment with a cervical collar incision is available for the symptomatic RSG without requiring a sternotomy while it descends until brachiocephalic vein, i.e. innominate vein. Histopathologically, it is usually benign in nature, but it should be awaked to be faced with an underlying lymphoma or the other neoplastic process.

**Keywords:** Retrosternal goiter; Histopathology; Immunohistochemistry; Thyroidectomy; Cervical approach.

#### Figure legend

*Figure 1:* A macroscopic specimen of the total thyroidectomy with marked right lobe by a black suture and retrosternal left lobe.

<sup>&</sup>lt;sup>1</sup> Department of Pathology, Giresun University Faculty of Medicine, 28100 Giresun, TURKEY <sup>2</sup> Division of General Surgery, Giresun University Faculty of Medicine, 28100 Giresun, TURKEY

# GEBELERİN HEPATİT ENFEKSİYONU AÇISINDAN TARANMASI VE HBV ENFEKSİYONU OLAN ANNEDEN DOĞAN BEBEKLERİN İZLEMİ: RİZE İLİ ÖRNEĞİ

Yasin YILDIZ<sup>1</sup>, İlknur Esen YILDIZ<sup>2</sup>

Giriş: Dünyadaki tüm annelerin yaklaşık %5'inde (%0,6-20) Hepatit B surface antijeni (HBsAg) pozitiftir. Ülkemizde gebelerde taşıyıcılık oranı %1,20-4,7 civarında bulunmuştur. Aşı ile korunabilen bir hastalık olan Hepatit B ile mücadele; başta aile hekimleri olmak üzere, kadın doğum hastalıkları, enfeksiyon hastalıkları ve çocuk bölümün birlikte hareket etmesini içeren multidisipliner yaklaşımını gerektirir. Gebelerin ve bebeklerin takibi, aşılama programı Toplum Sağlığı Merkezleri sorumluluğunda olduğundan tüm gebelerin hepatit açısından taranması, Hepatit B enfeksiyonu olan gebelerin enfeksiyon bölümüne yönlendirilerek takip ve tedavilerinin sağlanması, gebelerin doğumlarının bebek doğar doğmaz aşı ve immünglobülin yapılan ileri bir merkeze yönlendirilmesi, bebek doğduktan sonra aşı takiplerinin yapılıp, bebeklerin doğumlarının yedinci ayından sonra hepatit antikorlarına bakılarak aşının tutmadığı durumlarda ek doz aşı programına alınmasında aile hekimlerine önemli görevler düşmektedir. Böylelikle anneden bebeğe doğum esnasında hepatit bulaşı azaltılarak enfente bebeklerin doğması azalacak, doğan bebeklerin hepatit B enfeksiyonunun erken tanı ve tedavi sağlanmış olacak aynı zamanda aile içi ve toplum bulaşının da önüne geçilmiş olunacaktır.

Metod: Araştırmamız retrospektif olarak, Rize Eğitim Araştırma Hastanesi'nde HBV enfeksiyonu olan ve Aralık 2016 ile Ocak 2018 tarihleri arasında doğum yapan annelerden doğan bebeklerin dosyalarının taranması ile gerçekleştirilmiştir. Bebeklerin doğumda HBV immunglobülin alım oranları ve 7-12. aylar arasında Anti Hbs düzeylerinin kontrolü taranmıştır.

**Bulgular:** Çalışmamızda 52 annenin HBV enfeksiyonuna sahip olduğu tespit edilmiş olup bu gebeliklerin 5 (%9,6) tanesi spontanvajinal yol, 47 (90,4) tanesi C/S ile doğmuştur. Doğan bebeklerin tamamına HBV immünglobulin yapıldığı tespit edilmistir. 0,1,6. aylarda aşılama programına alınan hastaların 7-12. aylarında bakılan Anti Hbs düzeyleri Tablo 1'de verilmiştir.

Tablo 1. HBV enfeksiyonu olan annelerden doğan bebeklerin takipleri

|                        | Kız (n=28) |      |     | Erkek (n=24) |     |      | Toplam |     |      |      |
|------------------------|------------|------|-----|--------------|-----|------|--------|-----|------|------|
|                        | C/S        |      | SVY | 7            | C/S |      | SVI    | 7   | Тори | ım   |
|                        | n          | %    | n   | %            | n   | %    | n      | %   | n    | %    |
| HBIG                   | 25         | 89,3 | 3   | 10,7         | 22  | 91,7 | 2      | 8,3 | 52   | 100  |
| Anti-HBs titresi bakım | 18         | 64,3 | 2   | 7,1          | 16  | 66,7 | 2      | 8,3 | 38   | 73,1 |
| Ek aşı kürü yapılan    | 2          | 7,1  | 0   | 0,0          | 2   | 8,3  | 0      | 0   | 4    | 7,7  |
| HBs Ag pozitifliği     | 2          | 7,1  | 1   | 3,6          | 1   | 4,2  | 0      | 0   | 4    | 7,7  |

Sonuç: Çalışmamızda bebeklerinin dördünde HBs Ag pozitifliği saptanmış olup; bebekler takip ve tedavileri için Çocuk Enfeksiyon hastalıkları polikliniğine gönderildi. Beş bebekte ise hepatit B antikorlarının gelişmediği görüldü ve bebekler ek doz HBV aşısı için Aile Hekimine yönlendirildi. Sonuç olarak, gebelerin hepatiti açısından taranmasının, hepatit enfeksiyonu olan annelerin bebeklerin doğumları sonrasında HBIG ve hepatit aşısının yapılıp yapılmadığının kontrol edilmesinin, bebeklerin aşı takvimlerinin ve 7. aydan sonra Anti HBs ve HBs Ag tetkikleri kontrol edilmesinin aile içi ve toplumda hepatit b enfeksiyonunun azalmasına katkıda bulunacağını düşünmekteyiz

<sup>&</sup>lt;sup>1</sup> Recep Tayyip Erdoğan Üniversitesi Tıp Fakültesi Çocuk Sağlığı ve Hastalıkları ABD, Rize <sup>2</sup> Recep Tayyip Erdoğan Üniversitesi Tıp Fakültesi Enfeksiyon ve Klinik Mikrobiyoloji ABD, Rize

# THE KNOWLEDGE AND ATTITUDES OF PATIENTS' RELATIVES TOWARDS ORGAN DONATION IN OUR HOSPITAL

# <u>Sule BATÇIK¹</u>, Leyla KAZANCIOĞLU¹

<sup>1</sup> Recep Tayyip Erdoğan University Faculty of Medicine Anesthesiology and Reanimation Department, RİZE

#### Objective:

The purpose of this descriptive study was to determine the knowledge levels and attitudes of patients' relatives in Recep Tayyip Erdogan University Education and Research Hospital on organ donation (OD) and transplantation

#### *Methods:*

Of 246 subjects who agreed to participate in the study among patient's relatives of the in patients hospitalised in Recep Tayyip Erdogan University Education and Research Hospital between Augst 1th and 31th of 2018, were included in the study. Sociodemographic characteristics and the attitudes of the participants were collected with a questionnaire prepared by the investigators.

#### Results:

In our study, 246 participants between the ages of 18-65 were included. Demographic data of the participants are given in Table I. 42% of the participants were women. 51% of the participants give the correct answer to the question "Do you think brain death, coma, herbal life are the same concepts?" and also 90% of the participants give the correct answer to the question "Can the brain death be healed again?" 48% of the participants stated that they had access to information about brain death via radio and internet. 27 (11%) stated that they had donated organ. 124 (51%) participants who did not think about donating organ expressed their most important reasons for not wanting to intervene in their bodies (33%) and religious beliefs (23%). The most important reason for those who stated that they could not donate the organs of the first degree relatives (47%) stated that they did not want to harm the funeral of a relative. 77% of the participants stated that, in case of need, they could get organ donation from a patient whose brain death occurred. The answers to the question of where you would like to get information about organ donation are, 42% from the organ donation unit, 19% from the family physician and 18% from the educational institutions.

#### Conclusion:

Public education about organ donation and transplantation and a positive attitude on this issue are very important to increase the number of organ donations. Because of the religious effects, the majority of the people do not have positive look on organ donation. Therefore, it is evaluated that the necessary attention should be given to the studies on this subject. Although the media is a good tool for informing the public about organ donation, it should be kept in mind that the best place to obtain accurate and reliable information is the Organ Donation Unit. For this reason, in order to gain public trust and to give healthy information to the public, it is important to increase the number of Organ Donation Units in health facilities.

**Keywords**: Patient relatives, organ donation, attitudes

| FEATURES                 | n   | %  |
|--------------------------|-----|----|
| Gender                   |     |    |
| Male                     | 143 | 58 |
| Female                   | 103 | 42 |
| Age                      |     |    |
| 18-30                    | 67  | 27 |
| 31-50                    | 109 | 44 |
| 51-65                    | 70  | 29 |
| Marital Status           |     |    |
| Married                  | 169 | 69 |
| Single                   | 77  | 31 |
| Education                |     |    |
| Illiterate               | 10  | 4  |
| Literate/Elementary      | 53  | 22 |
| Secondary or High School | 77  | 31 |
| University               | 106 | 43 |
| Profession               |     |    |
| Unemployed               | 6   | 2  |
| Housewife                | 46  | 19 |
| Tradesman                | 46  | 19 |
| Laborer                  | 43  | 17 |
| Student                  | 31  | 13 |
| Civil Servant            | 44  | 18 |
| Retired                  | 30  | 12 |

Table I: Demographic data of participants

HEPATITIS B REACTIVATION IN HBSAG-NEGATIVE/ANTI-HBC-POSITIVE PATIENTS RECEIVING INTRAVENOUS CYTOTOXIC CHEMOTHERAPY FOR SOLID TUMORS: A RETROSPECTIVE ANALYSIS

Sami Fidan<sup>1</sup>, Evren Fidan<sup>2</sup>, Elanur Karaman<sup>3</sup>, <u>Turan Set</u>\*<sup>4</sup>, Murat Erkut<sup>1</sup>, Arif Mansur Cosar<sup>1</sup>

Ass Prof Dr, Department of Gastroenterology<sup>1</sup>, Faculty of Medicine, Karadeniz Technical University, Trabzon, Turkey

Ass Prof Dr, Department of Internal Medicine and Medical Oncology<sup>2</sup>, Kanuni Teaching and Research Hospital, Trabzon, Turkey.

Dr, Department of Medical Oncology<sup>3</sup>, Faculty of Medicine, Karadeniz Technical University, Trabzon, Turkey

\*(Speaker) Prof Dr, Department of Family Medicine<sup>4</sup>, Faculty of Medicine, Karadeniz Technical University, Trabzon, Turkey

**Purpose:** The prevalence of hepatitis B virus (HBV) reactivation and antiviral prophylaxis requirement in HBsAg-negative/ anti-HBc-positive patients receiving conventional chemotherapy for solid tumors is not fully understood. The aim of this study was to investigate the prevalence of HBV reactivation and the need for antiviral prophylaxis in HBsAg-negative/ anti-HBc-positive patients receiving intravenous cytotoxic chemotherapy for solid tumors.

**Methods:** This retrospective study involved 645 HBsAg-negative/ anti-HBc-positive patients undergoing intravenous cytotoxic chemotherapy for solid tumors from 2012 to 2017. Patients were categorized into two groups, those who received antiviral prophylaxis (n = 43) and those who did not (n = 602). HBV reactivation was defined as the presence of detectable serum HBV DNA or HBsAg seroconversion from negative to positive, with or without increased liver enzymes.

**Results:** Our study reflects real-life experience with patients with solid tumors with serological evidence of past HBV infection. In the non-antiviral prophylaxis group, only 3 patients (0.49%) developed HBV reactivation, while no HBV reactivation was observed in the group receiving antiviral prophylaxis. Two of the patients developing reactivation were successfully treated with rescue therapy, while the third died due to liver failure.

Conclusions: HBV reactivation is rare in HBsAg-negative and anti-HBc-positive patients receiving intravenous cytotoxic chemotherapy for solid tumors. It does not therefore appear logical for these patients to be routinely started on antiviral prophylaxis. However, since reactivation can lead to fatal outcomes in these subjects, patients must be closely monitored in terms of HBV-DNA positivization and/or HBsAg seroreversion, and pre-emptive antiviral therapy must be initiated as soon as HBV reactivation occurs.

## ASSESMENT OF THE NIGHT EATING SYNDROME IN A FAMILY HEALTH CENTER

# Ahmet ERAY<sup>1</sup>, Elif ATEŞ<sup>2</sup>, Turan SET<sup>2</sup>

**Introduction and Objective:** The night eating syndrome (NES) was first described by Stunkard in 1955 as a combination of eating disorder, sleep disorder and mood disorder with the main symptoms being morning anorexia, evening hyperphagia and insomnia (1). In this study, it was aimed to determine the frequency of NES in a family health center.

Method: The research was structured as a cross-sectional and descriptive study at a family health center, between February 2018 and August 2018. Total 403 volunteer participants aged over 18 years were included in the study who appealed to the family health center for any reason. Sociodemographic questionnaire and the Nigth Eating Questionnaire (NEQ) was administered. Also, the height and weight of the participants were recorded.

**Results:** The average age of participants was  $40.5\pm15.4$  years. Of these, 45.4% (n=183) were male and 54.6% (n=220) were female. A total of 11.7% (n= 47) of the sample screened positive for NES with a total NEQ score of  $\geq 25$ . No statistically significant association between a positive NES screening result and some of the sociodemographic parameters (gender, marital status, education, working status, place of residence) were found (p>0.05). Significant positive associations emerged between a positive NES screening and body mass index, age and smoking (p<0.05). No statistically differences were found between the two groups (NES and non-NES) with participants who take psychiatric medication (p=0.37).

Conclusion: In this study, the frequency of NES was found higher than other community based studies. NES which can be observed in the general population and especially in obese patients is overlooked even in family medicine and even obesity polyclinics. The diagnosis of individuals with NES will contribute to prevention of obesity. In this context, it would be beneficial to disseminate screening for NES in primary care.

**Keywords:** Night eating syndrome, Night eating questionnaire, Primary care

## References:

1. Stunkard AJ, Grace WJ, Wolff HG. The night-eating syndrome: a pattern of food intake among certain obese patients. Am J Med 1955; 19:78–86.

<sup>&</sup>lt;sup>1</sup> Kürtün Family Health Center, Gümüşhane, Turkey

<sup>&</sup>lt;sup>2</sup> Karadeniz Technical University; Medical Faculty, Department of Family Medicine, Trabzon, Turkey

# EVALUATION OF VİTAMİN B12 LEVELS İN PREGNANT WOMEN LİVİNG İN RİZE AREA

Şenol Şentürk<sup>1</sup>, <u>Beril Gürlek<sup>1</sup></u>

<sup>1</sup>Recep Tayyip Erdoğan University Faculty of Medicine, Department of Obstetrics and Gynecology, Rize, Turkey.

Objective: Vitamin B12 deficiency in pregnant women is an important health problem affecting not only mothers, but their babies as well. B12 deficiency is rare in the neonatal period. Vitamin B12 is actively passed through the placenta from mother to baby during pregnancy. The neonate is born with 25-50 mcg vitamin B12 stored in the body. Vitamin B12 is a co-factor that functions in DNA synthesis, methylation, and neurotransmitter synthesis, while it is also involved in the homocysteine/methionine cycle. Therefore, deficiency of vitamin B12 during periods of rapid growth such as neonatal period and infancy leads to much more important neurological symptoms than the findings of anemia in other periods. The objective of this study was to identify the levels of vitamin B12 in pregnant women that live in the Rize region, and to specify the rates of deficiency in mild and severely lacking cases.

Materials and methods: In the present study, 717 patients who applied to the pregnancy clinic were scanned for their levels of vitamin B12 between January 2016 and September 2018 in the Recep Tayyip Erdogan University, Faculty of Medicine, Education and Research Hospital. Vitamin B12 levels were recorded. Normal reference values for vitamin B12 levels were taken as 189-883 pg/mL. Severe vit B12 deficiency was accepted as 100 pg/mL. Appropriate statistical methods were used to determine the mean vitamin B12 levels as well as normal, mild, and severe rates of deficit.

**Results:** Mean age of the pregnant women included in the study was  $29.23\pm5.76$  (16-52). Mean level of vitamin B12 of the pregnant women was  $256.93\pm99.9$  pg/mL. The median value of vitamin B12 was 239 (max. 809 - min. 60). In 541 (75.5%) of the pregnant women, vitamin B12 levels were between 189-883 pg/mL which was considered as the normal level. The levels were below normal in 176 (24.5%) of the pregnant women, and in 6 (0.8%) of them the levels were below 100 pg/mL which was considered as severe deficiency.

Conclusion: The frequency of vitamin B12 deficiency in pregnant women in our region was determined to be 24.5%, which is quite high. The underlying cause of this is malnutrition. Since vitamin B12 deficiency is mainly due to the consumption of insufficient amounts of animal food, it will be appropriate to evaluate the vitamin B12 level at the beginning of pregnancy in all women who live in regions of low socioeconomic level.

**Keywords:** Vitamin B12, maternal vitamin B12 deficiency, pregnancy.

Tonsiller hypertrophy and soft palate staging in the ethiology of participating seizures

# Dr.Beril Dilber

Karadeniz Teknik Üniversitesi Çocuk Sağlığı ve Hastalıkları Çocuk Nöroloji Bölümü

#### Aim:

Participatory seizures are a common nonepileptic paroxysmal event in childhood. Participation seizures occur at a rate of 4-5% in the community and begin at the age of one year. Iron deficiency has also been reported in the etiology. The imbalance between oxidative stress oxidation and antioxidation creates cell damage. In deficiencies in iron metabolism, it causes oxidative stress at cellular level and decreases antioxidant levels. Hypoxia provides the most important contribution. In the etiology of the seizure seizures, it is important to investigate the tonsil examination, obstruction and hypoxia. In our study, we detected iron deficiency in children with seizure episodes and we also examined the relationship between obesity in the airway and tonsil size or soft palate staging.

#### *Method:*

A total of 90 patients were included in the study. 45 patients were followed-up in pediatric neurology outpatient clinic. The control group was formed by taking 45 patients from the inpatient clinic. Consent form was obtained from the families participating in the study and ethics committee approval was obtained. The number of patients who had a seizure status of 45 (male / female: 23/22) was the same as the control group. In the study, soft palate stages and tonsillar hypertrophy staging were performed in the control group. The type of sparing seizures of the patient group and family history were determined by a pediatrician and referred to us. Electrocardiography, telecardiogram, denver development test, cranial imaging and electroencephalogram were evaluated in the patient group. Hemogram, iron, iron binding, ferritin were evaluated and the treated group was evaluated at 3-month intervals to evaluate the relationship between the participation seizures and anemia. The incidence of the attendant seizure was between 2-5 days of age and those with 5 or more seizures were determined as heavy groups. In addition, soft palate stage 3 and tonsillar hypertrophy staging was performed on 4.

### Result:

The ages of the patients were between 8 months and 56 months and the mean age at onset was  $24.1 \pm 12.4$  months. The time of onset of complaints was  $13.16 \pm 9.66$  months. In the study, hemoglobin, MCV, RDW, Fe, FeBK and ferritin values of the patients were  $11.27 \pm 1.09$ ,  $74.8 \pm$  $5.96, 13.67 \pm 0.57, 60.73 \pm 29.74, 328.7 \pm 73.2, 21.0 \pm 1.12$ , respectively. The mean values were  $12.2 \pm 0.84$ ,  $77.6 \pm 4.48$ ,  $11.25 \pm 1.25$ ,  $66.91 \pm 32.05$ ,  $288.41 \pm 29.9$ ,  $43.98 \pm 31.30$ , respectively (p 120.05). After the treatment, a significant increase was observed in the hemogram and iron parameters of the patients. As the number of attendance seizures increased, a significant decrease was observed in the MCV values of the patients (p: 0.023, r: 0.589). Anemia parameters were lower than their age groups according to the reference ranges in the severity of joining seizures. There was no significant difference in the family history of the patients and the seizures were 90% cyanotic type. Only one of 45 patients had a muscular type ventricular septal development test and telecardiogram, defect. Denver cranial electroencephalogram studies did not reveal any pathology.

According to soft palate staging, 13.2% of the patient group was stage1, 28.9% stage2, 50.0% stage3 and 7.9% grade4. The control group had 60% stage1, 6.6% stage2, 6.6% stage3, 4.4% stage 4. 47.4% of stage1, 36.8% stage2, 15.8% stage3, and 78% stage1, 11% stage2, 11% grade3 according to the tonsil hypertrophy staging. While tonsil staging of the children with participation seizures was stage 1-2 (total 84.2%), soft palate staging was stage 2-3 (total 78.9%) and there was a significant difference with the control group (p: 0.000). There was a significant decrease in MCV values when soft palate staging increased (p: 0.047).

We found that iron therapy improved the clinical status of children with severe seizures and severe anemia parameters, and a significant improvement in post-treatment clinics. Although it may be thought that when the participation seizure can be differentiated from other types of seizures, it may be thought that there may be severe hypoxia due to an anatomical obstruction.

# SÖZEL 73

# DİL VE KONUŞMA BOZUKLUKLARINDA ETİYOLOJİK DEĞERLENDİRME VE ELEKTROSENSEFALOGRAFİ BULGULARI

# Ozan Koçak<sup>1</sup>

<sup>1</sup>Salık Bilimleri Üniversitesi Samsun Eğitim ve Araştırma Hastanesi Çocuk Nörolojisi, SAMSUN

AMAÇ: Sağlam çocuk izleminde hekimler, genellikle fiziksel sorunlar üzerine yoğunlaştığından, dil ve konuşma bozuklukları, aile tarafından bir yakınma olmadıkça çoğunlukla atlanabilmektedir. Konuşma; kişinin düşüncelerini ve duygularını konuşma sesleriyle ifade etme yeteneğidir. Dil ise, insanların duygu, düşünce ve isteklerini anlatmak için kullandıkları ses ya da işaretler sistemidir. Konuşma; motor, kognitif ve linguistik özellikleri olan bir işlevdir. Bu özelliklerden biri olmadığında ya da onunla ilgili bir problem olduğunda, diğer ikisi sağlıklı olsalar da normal bir konuşma işlevi ortaya konamaz. Dil ve konuşma gecikmesi idiopatik, nörolojik, genetik, duyusal veya nöropsikiyatrik nedenler sonucu da görülebilir. Özellikle son 20 yıldır giderek artan sayıda elektrosensefalografi (EEG) anormallikleri dil ve konuşma bozukluklarında tanımlanmaya başlanmıştır. West sendromu, Lennox-Gastaut sendromu, Landau Kleffner sendromu, nonkonvulsif status epileptikus gibi dil ve konuşma bozuklukları ile yakın ilişkili epileptik ensefalopatiler yanında, klinik nöbeti olmayan, EEG'de subklinik epileptik aktivite saptanan hastalarda mevcuttur. Bu çalışmanın temel amacı, nöbet öyküsü olmayan, dil ve konuşma bozukluğu şikayetleri ile başvuran çocuklarda, etiyolojik nedenleri saptanmak ve EEG bulgularını değerlendirmektir.

YÖNTEM: 2016-2017 yılları arasında çocuk nöroloji polikliniğine, dil ve konuşma bozukluğu nedeni ile başvuran, nöbet öyküsü olmayan, 1-5 yaş aralığında 125 hasta çalışmaya alındı. Hastaların demografik verileri, EEG/beyin MRG sonuçları ve laboratuvar tetkikleri retrospektif olarak dosyalarından toplandı. EEG anormalliği saptanan ve antiepileptik tedavi başlanan hastaların tedavi öncesi EEG bulguları ve gelişim testleri ile, tedavi sonrası EEG ve gelişim testleri değerlendirildi.

BULGULAR: Hastaların 75' i erkek, 50' si kadındı. Ortalama yaşları 3.6 yıldı. Hastaların 80'i sezeryan doğum ile 45'i normal doğum ile dünyaya gelmişti. 35 hastada akraba evliliği, 28 hastada erken doğum öyküsü, 12 hastada düşük doğum ağırlığı öyküsü vardı. Ailede konuşmada

gecikme öyküsü olan hasta sayısı 18'di. Hastaların 42'sinde ekran maruziyeti (TV, tablet, bilgisayar, telefon), 15'inde otistik bozukluk, 10'unda EEG anormalliği, 5'inde işitme problemi ve 1 hastada hipotiroidi saptandı. Ekran maruziyeti olan hastaların çoğunda, aile eğitimi, ekran kısıtlaması, kreş/anaokulu ve gerekirse özel eğitim desteği ile belirgin düzelme sağlandığı gözlendi. EEG anormalliği saptanan hastaların beyin MRG'i normaldi. Hastaların 6 'sında konuşmada gerileme öyküsü vardı. 2 hastaya EEG bulgularına ve klinik özelliklerine göre Landau Kleffner sendromu, 2 hastaya nonkolvusif status epileptikus, 1 hastaya West sendromu tanısı konuldu. Diğer 5 hastada ise epileptik sendromlara uymayan EEG anormallikleri vardı. Hastaların 4'ü, konuşma geriliği nedeni ile özel eğitim alıyordu ve ilerleme sağlanmamıştı. Hastaların uygun antiepileptik tedaviler başlandıktan sonraki değerlendirilmelerinde, hem EEG' lerinde hem de gelişim testlerinde belirgin düzelme olduğu görüldü.

Sonuç: Dil ve konuşma bozukluklarına çocuklarda sık karşılaşılmaktadır, ancak bazen aile tarafından önemsenmediğinden, bazen de hekimler tarafından atlandığından, önemli bir kısmında tanı ve tedavide gecikmeler olabilmektedir. Prognozda, önemli noktalarda biri erken yaşta, özellikle üç yaşından önce, tedaviye başlanmasıdır. Aslında bir çeşit çocuk istisması sayılabilecek ekran maruziyeti, ülkemizde son yıllarda giderek artmaktadır. Önlenebilir bir neden olması nedeni ile ekran maruziyeti konusunda toplumsal bir duyarlılık oluşturulması gerektiği açıktır. Bu çalışmada saptanan, otistik bozukluklar ve işitme problemleri, dil ve konuşma bozukluklarının diğer iyi bilinen nedenleridir. Ancak klinik nöbeti olmayan çocuklarda, epilepsi/ epileptik sendromların, dil ve konuşma bozukluğunun nedeni olabileceği genellikle hatırlanmaz. Bu çalışmada görüldüğü gibi, özellikle dil ve konuşma fonksiyonlarında gerileme olan hastaların, EEG çekilmesi ve nörolojik değerlendirme amacıyla çocuk nörolojisi olan merkezlere yönlendirilmesi gereklidir.

# THE ROLE OF ELASTOSONOGRAPHY AND ULTRASONOGRAPHY IN THE CHARACTERIZATION OF THE BREAST LESIONS

Sebnem Alanya Tosun<sup>1</sup>, Selen Gürsoy Erzincan<sup>2</sup>, Mehmet Sipahi<sup>1</sup>, Alptekin Tosun<sup>3</sup>

<sup>1</sup>Giresun University School of Medicine, Department of Obstetrics and Gynaecology, Giresun, Turkey

**Objective**: Long-term follow-up of suspicious lesions in the breast and unnecessary biopsies constitute a problem in the patient management. The aim of this study was to assess the role of elastosonography in the characterization of the lesions that were detected as Breast Imaging Reporting and Data System (BI-RADS) 3 and 4.

Materials and methods: A total of 13 patients younger than 40 years of age who received physical examination, ultrasonographic and elastosonographic evaluation, were subjected to percutaneous core biopsies under ultrasound guidance. Breast lesions were classified and scored according to BI-RADS. The cut-off values for the qualitative and quantitative variables for elastosonography which can be used to differentiate benign and malign breast masses were determined. Along with this data, BIRADS classification was re-categorized, and a modified BIRADS classification was performed by decreasing or increasing the category. The sensitivity, specificity, positive and negative predictive values were compared between the first and the second BIRADS classifications.

Results: Thirteen patients detected with single or multiple lesions in the breast were included in the study. The mean age was 32 years. According to the ultrasonographic examination of 15 breast lesions, 4 of them were classified as BI-RADS 3 and 11 were classified as BI-RADS 4. Elasticity values were classified following color scale grouping. Elastosonography showed that 9 blue lesions were the hardest and had low elasticity, 2 were green with average elasticity and 4 soft lesions were red and the most elastic. Histopathologically, 40% of the lesions were benign and 60% were malign.

**Conclusion:** Combined application of elastosonography with ultrasonographic evaluation is cost-effective and promising tool that improves the characterization of breast lesions, leading to decrease in unnecessary benign biopsies.

<sup>&</sup>lt;sup>2</sup>Trabzon Kanuni Education and Research Hospital, Trabzon, Turkey

<sup>&</sup>lt;sup>3</sup> Giresun University School of Medicine, Department of Radiology, Giresun, Turkey

PREVALENCES OF HELICOBACTER PYLORI INFECTION, ATROPHIC GASTRITIS AND INTESTINAL METAPLASIA IN PATIENTS WITH COLONIC ADENOMATOUS POLYPS: WESTERN DIET ENIGMA

ARZU AYRALER, MUHAMMED ALİ AYVAZ, CUMHUR DÜLGER, SIMGE KÖKLEŞ

Associate Professor, Giresun University Medical Faculty Department of Family Medicine / Giresun

Associate Professor, Giresun University Medical Faculty Gastroenterology Department/ Giresun Professor, Giresun University Medical Faculty Gastroenterology Department / Giresun Intern Doctor, Giresun University Medical Faculty / Giresun

AIM: Helicobacterpylori (HP) is a spiral-shaped, gram-negative bacteria colonized in the gastric mucosa The infection rate of the global population by H. pylori has been reported as being more than 50%. Intestinal metaplasia (IM) is the conversion of the superficial epithelium of oxynticand antral mucosa in to the intestinal epithelium and is considered as premalign lesion of the gastric mucosa.

With large increases in gastric cancer diagnoses in recent decades and advances in novel endoscopic procedures, more subjects are screening for gastric cancer by than ever before. One of the most important gastric premalign lesion has been reported as gastric intestinal metaplasia (GIM) which is characterised by either enteric or colonic mucosal immigration in to the gastric mucosa(1). Helicobacter pylori (HP) infection, has been implicated in the pathogenesis of gastric cancer. GIM is the leading cause of gastric cancer in the many Asian populations. Early diagnosis of atrophic gastritis (AG), intestinal metaplasia (IM), dysplasia leads to improved out comes but diagnosis is often delayed leading to increased rates of morbidity and mortality. Despite recent progress in endoscopic screening programmes, GIM-related laboratory features poorly understood and recognized(1). Almost 25% of subjects of Asian populations have also IM. Surrogate markers that accurately detect IM in Asian populations are urgently needed. Colonic adenomas (CA) are precurs or lesions in CRC that a rise through the adenomacarcinoma sequence. CRC develops due to the formation of malignant neoplasms with in the lining of the large intestine (2).

Epidemiologic studies indicate that western diet plays a key role in the development of colorectal cancer risk in humans(3).

However, there is still no study regarding the relation between IP and CA. Thus, we conducted a retrospective study whether a relationship between colonic polyps and both of HP and IM is exist.

MATERIAL AND METHODS: 40 patients (17male&meanage  $58 \pm 3.2$  years) with colonic adenomatous polyps were under went upper GI endoscopy. Gastric biopsies were stainedusing HE and Giemsa stains. Metaplasi a type was visualize dusing PAS-Alcian blue stain. Control group (43 patients; 23 female; mean age  $57 \pm 2.4$  years) was selected dyspeptic patients.

**RESULTS**: In polyp group; 22(55%) had HP; 3 (7.5 %) had atrophic gastritis and 4 (10%) had IM. In control group; 25 (55%) had HP; 3 (7%) had atrophic gastritis and 13(28%) had IM. Colonic adenoma group had significantly lower rates of IM than control group(P<0.005).

**DISCUSSION:** Risk factors of IM has been reported as presence of H. Pylori infection, older ages, a smoking history strong spicy food, occupation status and the presence of IL 10-592 C/A (4).

It has been shown that approximately 70% of the mice fed with this Western diet exhibited nuclear atypia in their colonic epithelia, and 40% of the mice showed features of dysplastic crypts at the end of two years (5).

Frequently eating cooked green vegetables, nuts, dried fruit, pulses, and brown rice has been associated with a lower risk of colorectal polyps. High calcium intake offers a protecto reffect against distal colon and rectal tumors as compared with the proximal colon (6).

In the current prospective study, IM was less prevalent in patients with colonic polyps. Otherhand, colonic adenom as are mostly caused by high fat western diet. It may be postulated that western style diet may also protective for IM as well .Moreover, our comprehensive analysis identifie severall targets for diet trials to prevent IM.

#### **REFERENCES:**

- 1-Liu KS, Wong IO, Leung WK. Helicobacter pylori associated gastric intestinal metaplasia: Treatment and surveillance. World J Gastroenterol. 2016 Jan 21;22(3):1311-20.
- 2-Calvert PM, Frucht H. The genetics of colorectal cancer. AnnIntern Med 2002; 137: 603-612
- 3- Magalhães B, Peleteiro B, Lunet N. Dietary patterns and colorectal cancer: systematic review and meta-analysis. Eur JCancerPrev 2012; 21: 15-23
- 4-Kim N, Park YS, Cho SI, Lee HS. Prevalence and risk factors of atrophic gastritis and intestinal metaplasia in a Korean population with out significant gastroduodenal disease. Helicobacter. 2008 Aug; 13(4):245-55.
- 5-Pandurangan AK, Divya T, Kumar K, Dineshbabu V, Velavan B, Sudhandiran G. Colorectalcarcinogenesis: Insights in to the cellde at hand sign altransduction pathways: A review. World J Gastrointest Oncol. 2018 Sep 15;10(9):244-259.
- 6-TárragaLópez PJ, Albero JS, Rodríguez-Montes JA.Primary and secondary prevention of colorectal cancer.Clin Med Insights Gastroenterol. 2014 Jul 14;7:33-46. doi: 10.4137/CGast.S14039. eCollection 2014.

## SÖZEL 76

# VİTAMİN D LEVELS AND EFFECT OF PREOPERATİVE REPLACEMENT İN LAPAROSCOPİC SLEEVE GASTRECTOMY PATİENTS

# Basar Erdivanlı<sup>1</sup>

<sup>1</sup>Recep Tayyip Erdogan University Medical Faculty, Department of Anesthesiology and Reanimation, Rize

Aim

Vitamin D deficiency is common in morbidly obese patients with endocrine problems. Bariatric surgery may benefit such patients through careful supplementation of vitamin D during the preoperative preparations. This study retrospectively analyzed the progression of serum vitamin D level in these patients.

Methods

Patients who had laparoscopic sleeve gastrectomy in 2017 and 2018 were included. The patient demographics, serum total vitamin D, parathormone and calcium levels, and medical conditions related to vitamin D deficiency were obtained from the patient charts. Total serum vitamin D was measured at the day before the operation and at postoperative 3rd day and 1st month.

#### Results

Median initial vitamin D level was 12.4 ng/ml. Following a median patient-customized vitamin D replacement period of  $21.2 \pm 4.6$  days, this level slightly increased. Despite continuing replacement of vitamin D, the median vitamin D level decreased to 11.15 ng/ml (8.3-17.2) at postoperative 3rd day. At the first month control, serum total vitamin D level was found to be significantly increased to 17.1 ng/ml (13.2-21.5).

#### Discussion

This study showed that morbidly obese patients with poor diabetic control have lower vitamin D levels compared to their counterparts with similar body mass index and diabetic burden.

Due to the retrospective nature of this study, it is not clear if vitamin D deficiency is preventable by a preoperative replacement therapy or if a postoperative replacement therapy may be more effective and/or economic compared to a preoperative replacement therapy. Such suggestions should be based on randomized controlled trials.

Keywords: metabolic surgery, laparoscopic sleeve gastrectomy, morbid obesity, vitamin D, deficiency of vitamin D, replacement therapy, diabetes mellitus

#### Introduction

Vitamin D deficiency is common in morbidly obese patients with endocrine problems. Bariatric surgery may benefit such patients through careful supplementation of vitamin D during the preoperative preparations, and improvement in absorption of vitamin D [1].

In this institution, a multidisciplinary obesity team reviews morbid obese patients with poor diabetic control despite use of oral ad subcutaneous drugs for indications of laparoscopic sleeve gastrectomy operation; and orders a customized diet plan to restore essential nutrients and vitamins.

In order to understand whether the preoperative replacement therapy is effective in preventing possible complications related to vitamin D deficiency, and whether the postoperative replacement therapy is effective, we designed a pilot study. This retrospective case analysis analyzed the progression of serum vitamin D level in these patients.

#### Patients and methods

Patients who had laparoscopic sleeve gastrectomy in 2017 and 2018 were included. The patient demographics, serum total vitamin D, parathormone and calcium levels, and medical conditions related to vitamin D deficiency were obtained from the patient charts.

Frequency of vitamin D deficiency was investigated using the total serum vitamin D level (measured with a chemiluminescent assay on Abbott i2000SR analyzer; reference range: 20-55 ng/mL) obtained after the first encounter of the patient with the multidisciplinary obesity team. Patients who had an insufficiency or deficiency of vitamin D received an oral bolus dose of vitamin D in the form of Devit-3 IM/Oral ampoule (300000 IU/ampoule). The dose was calculated as:

5000 *IU* \* (days until the operation)

As an example, in case of a patient who was agreed to be operated 20 days later received 100000 IU (5000 \* 20) of Devit-3 ampoule.

Total serum vitamin D was measured at the day before the operation and at postoperative 3rd day and 1st month.

Since the amount of vitamin D produced by skin depends on many factors including season and latitude, in order to have an understanding of the study patients, an equal amount of patients with the same month of admission, and geographical location of residence and with similar body mass index and history of diabetes mellitus, were formed as a control population.

#### Results

Data from a total of 69 LSG patients were analyzed. Patient demographics obtained during the first encounter with the obesity team are given in Table 1.

Median initial vitamin D level was 12.4 ng/ml (Table 1). The progression of vitamin D level is given in Figure 1. Briefly, following a median patient-customized vitamin D replacement period of  $21.2 \pm 4.6$  days, where a total of 59 patients received a median of 100000 IU (range 65000-150000 IU) vitamin D, this level slightly increased. This period ranged from 13 to 29 days.

Despite continuing replacement of vitamin D, the median vitamin D level decreased to 11.15 ng/ml (8.3-17.2) at postoperative 3rd day.

The mean day to first-month follow-up was  $30.7 \pm 1.3$  days. At the first month control, serum total vitamin D level was found to be significantly increased to 17.1 ng/ml (13.2-21.5). Discussion

This study showed that morbidly obese patients with poor diabetic control have lower vitamin D levels compared to their counterparts with similar body mass index and diabetic burden. Since the groups were propensity-matched by smoking status, geographical location, season (month) of admission, the most possible reasons may be type of dressings, sedantery lifestyle, or indoor activities limiting exposure to sun, and possible anxiety related to body shape which may have caused chronic stress. Unfortunately we did not include such data in the patient charts, therefore do not have any related data. These information will be actively sought in the future cases.

Although the total dose of vitamin D3 received by our patients is equal to similar studies, the customized diet plan was minimally effective in replacing vitamin D in our patients. Although some studies suggest the use of a daily dose of 5000 IU, there is a study which suggests a dose of 10000-300000 IU of vitamin D3 in the first month, the latter being more effective [2, 3]. Since the preoperative replacement period was as short as 13 days for some patients, this meant that some patients received less than 100000 IU. This might be the reason for the ineffecticeness of the replacement. We may conclude that a minimum bolus dose of 100000 IU might be more effective in the future. Another possibility is that insufficient intestinal absorption of vitamin D due to endocrine problems related to morbid obesity may be another factor. If this is the case, a preoperative replacement program of vitamin D may be a futile effort, which is worth to investigate.

An abrupt fall in vitamin D following surgery is noticed. It is possible that surgical stress, or cytokine release due to wound healing may cause this. Unfortunately we do not have data related to both of these conditions. It is interesting to note that although all patients had lower vitamin D levels, none of them had any complication related to deficiency of vitamin D. There are studies suggesting a link between vitamin D deficiency and intra- and post-operative respiratory problems [4]. Since none of the patients had any respiratory complications during the perioperative period or intensive care stay, it is not clear if this fall is clinically important. This may be related to the observational nature of this study or the small number of patient population.

Another possibility is that this is the expected course of serum vitamin D concentration following a replacement. An example of such a course is illustrated in Figure 2. Briefly, following a bolus dose of vitamin D, the serum total vitamin D concentration gradually increases during the first 20 days, ten falls slightly and stabilizes for a short time, and then starts to fall back to the initial value. If this is the case, this is not an abnormality, but suggests a need for a higher initial dose. Yet another possibility is that this fall in serum total vitamin D level may be due to the hemodilution caused by the intravenous hydration during the intensive care stay. As is known, these patients receive a very limited amount of food and fluids during the first few days, hence the requirement for the intravenous hydration.

#### Conclusions

Considering all the abovementioned limitations of this pilot study, it is not clear if vitamin D deficiency is preventable by a preoperative replacement therapy. Results of randomized controlled trials should be awaited until a decision of postponing the surgery due to vitamin D deficiency can be suggested. Secondly, this pilot study may suggest that a postoperative

replacement therapy may be more effective and/or economic compared to a preoperative replacement therapy.

## References

- 1. Dix CF, Bauer JD, Wright OR. A Systematic Review: Vitamin D Status and Sleeve Gastrectomy. Obes Surg 2017;27(1):215-25.
- 2. Trivedi DP, Doll R, Khaw KT. Effect of four monthly oral vitamin D3 (cholecalciferol) supplementation on fractures and mortality in men and women living in the community: randomised double blind controlled trial. BMJ 2003;1;326(7387):469.
- 3. Osborn J, Germann A, St Anna L. Clinical inquiries. Which regimen treats vitamin D deficiency most effectively? J Fam Pract 2011;60(11):682-3.
- 4. References Tas N, Noyan T, Yagan O, Hanci V, Canakci E. Preoperative Vitamin D levels and respiratory complications of general anesthesia. Niger J Clin Pract 2018;21(10):1278-83.

Table 1. Demographic variables and frequencies of laparoscopic sleeve gastrectomy patients (LSG group) and control group.

|                        | LSG group        | Control group    | p value |
|------------------------|------------------|------------------|---------|
|                        | (n = 69)         | (n = 69)         |         |
| Age, years             | 39±11            | 41±12            | NS      |
| Female gender, n (%)   | 39 (56%)         | 49 (52%)         | NS      |
| Body mass index, kg/m2 | 46.7 (42.9-50.5) | 46.2 (44.1-52.6) | NS      |
| Smoker                 |                  |                  |         |
| Active, n (%)          | 12 (18%)         | 10 (14%)         | NS      |
| Past, n (%)            | 21 (30%)         | 25 (36%)         |         |
| Never, n (%)           | 3 (52%)          | 34 (50%)         |         |

*Table 2. Serum biochemistry values at the first encounter with the morbid obesity team.* 

|                     |                     | 1                | 1                 |
|---------------------|---------------------|------------------|-------------------|
| 25(OH)D, $ng/mL$    | 12.4 ng/ml (8-16.8) | 35.9 (10.2-42.2) | < 0.001           |
|                     |                     |                  | 95% CI: 2.3 - 5.4 |
| Normal, n(%)        | 10 (14%)            | 59 (86%)         | < 0.001,          |
| Insufficient, n (%) | 35 (51%)            | 10 (14%)         | $x^2 = 21.93$     |
| Deficient, n (%)    | 24 (35%)            | -                |                   |
| Parathormone, ng/mL | 79.9 (56.9-104.5)   | 48.5 (31.7-70.4) | < 0.001           |
| High, n (%)         | 45 (65%)            | 19 (28%)         | < 0.001,          |
| Normal, n (%)       | -                   | 7 (9%)           | $x^2 = 22.25$     |
| Low, n (%)          | 24 (35%)            | 43 (63%)         |                   |
| Calcium, mEq/L      | 9.43±0.68           | 9.45±0.62        | 0.449             |
| High, n (%)         | 7 (10%)             | 4 (6%)           | < 0.001,          |
| Normal, n (%)       | 57 (83%)            | 62 (90%)         | $x^2 = 77.58$     |
| Low, n (%)          | 5 (7%)              | 3 (4%)           |                   |

Data conforming to normal distribution are represented as mean±standard deviation; Data not conforming to normal distribution are presented as median (interquartile range); Categorical data are presented as count (percent%)

25(OH)D: serum 25-hydroxyvitamin D; normal range was defined as 20-40 ng/mL; insufficiency was defined as between 10-20 ng/mL, including the ranges; deficiency was defined as <10 ng/mL

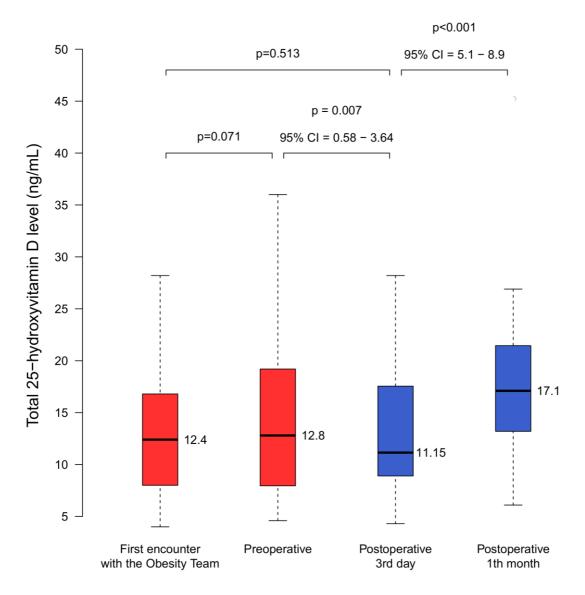


Figure 1: Progression of serum vitamin D level beginning from the first contact with the patient until the first month control.

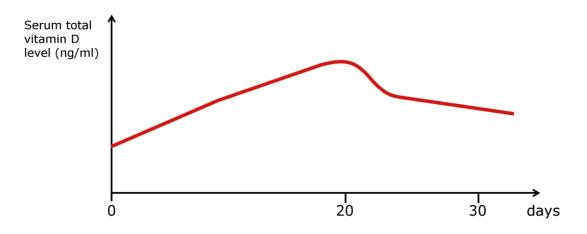


Figure 2: The expected course of serum vitamin D concentration following a replacement.

# SEROPREVALENCES HEPATITIS B ANTIGEN AND HEPATITIS C ANTIBODY AND DIAGNOSTIC TOOLS IN PATIENTS WITH HELLP SYNDROME

<u>Muhammed Ali Ayvaz</u><sup>1</sup>, Arzu Ayraler<sup>2</sup> Ahmet Cumhur Dülger<sup>3</sup>, Tuğrul Kesicioğlu<sup>4</sup>

Giresun University Medical Faculty of Gastroenterology Department/Giresun Giresun University Medical Faculty of Department of Family Medicine / Giresun Giresun University Medical Faculty of GastroenterologyDepartment/Giresun Giresun University MedicalFaculty of General Surgery Department/Giresun

Introduction: HELLP (hemolysis, elevated liver enzym elevels, low platelet count) syndrome is a rare but dramatic illness frequently complicated by cerebral edema and multi organ failure. It is characterized by the presence of microangiopathic hemolysis, elevated liver enzymes and low platelet count. Discriminating HELLP from other pregnancy related disorders is often hard and may result in increased mortality (1).

Otherhand, there is still no data about both hepatitis B and HCV prevalences in patients with HELLP. Furthermore, we also examined the laboratory parameters of HELLP other than classical laboratory triad.

Methods: A retrospective chart review of diagnosed as HELLP syndrome between Jan 2017 and May 2018 was performed. Patients (41 women; the mean age was 30.6±7.4 years)with HELLP syndrome were identified via review of obstetric, operative, and laboratory reports. Patients were excluded if their evaluation was incomplete, the patient was deceased, or did not have follow-up care at our institution following denial of listing. The medical chart of each patient was reviewed and relevant information retrieved. Control group (129 women; the mean age was 30.4±7 years) was selected from age-matched pregnant women with out HELLP syndrome at the similar pregnancy trimester.

**Results:** There were 4 deaths on the ICU (10% mortality rate) among HELLP cases. Whereas 4 subjects (3.1%) in control group were tested positive for hepatitis B surface antigen, there was no HBS positive case (0%) in HELLP group. But it was not statistically significant (P=0.260). One subject (0.5%) tested positive for Anti-HCV antibody in control group; and one (2.5%) had positive for anti-HCV antibody in HELLP group. There was norobust association between HCV seropositivity and HELLP syndrome (P=0.389). At further analysis; there was a significant and robust difference between control group and HELLP patients in terms of the mean urinary protein level ( $183\pm211$  versus  $418\pm347$  mg/dl); the mean hemoglobin level ( $10.33\pm1.63$  versus  $9.75\pm9.75$ mg/dl); the mean platelet level( $201\pm74$  versus  $85\pm46$  percubic milliliter); the mean ALT level ( $22\pm24$  versus  $160\pm258$  U/L); the mean ASTlevel( $33\pm49$ versus $295\pm564$ U/L); the mean creatinin level ( $0.6\pm0.21$ versus $0.91\pm0.8$ mg/dl) the mean LDH level ( $553\pm275$  versus  $2106\pm2020$  U/L); the meanD dimer level( $4.5\pm4.7$  versus $12.8\pm10.5$  U/L) and the mean APRI score ( $0.16\pm0.2$  versus $3.47\pm1.7$ ).

**Discussion:** The HELLP syndrome occurs mostly beyond 22 week and after delivery; 20% progress from severe eclampsia, complicates 0.5% of pregnancies and there currence rate is high, approaching 20% in severe cases. It is characterized by microangiopathic hemolysis with burr cellss and schistocytes on peripheral smear; elevated liver enzym elevels, wit has part at etransaminase (AST) exceeding alanineaminotransferase (ALT) levels; and a platelet count lowerthan 100,000/mm (2).

The HELLP syndrome is more common in multiparous women and can manifest in 30% after delivery. Abdominal pain is the usual symptom, and rapid progression to disseminated intravascular coagulation, renal failure, subcapsular liver hematoma, and hepatic rupture are described. Maternal mortality is about 1% but reaches 60% in cases of hepatic rupture. Perinatal death is variable and can reach 37% when the syndrome occurs at an earlier stage of pregnancy. Immediate delivery is the definitive treatment for HELLP syndrome(3).

Recently, authors revealed that D-dimer levels increased progressively and significantly during pregnancy and peaked in the third trimester, in which D-dimer levels were above the conventional cut-off point (500  $\mu$ g/L) in 99% of pregnant women. The following reference intervals were also defined: first trimester: 169–1202  $\mu$ g/L, second trimester: 393–3258  $\mu$ g/L and third trimester: 551–3333  $\mu$ g/L(4).

In the current study we firstly demonstrated that, a D-dimer level above than 10.000µg/L was a additional key diagnostic factor of the HELLP syndrome. Otherhand, the AST to ALT ratio index higher than 1 point but lower than 2 point was also a characteristic factor for diagnosing HELLP in connection with elevated liver enzymes.

APRI score has been used for diagnosing liver cirrhosis for a long time. A score higher than 3 points is strongly suggestive noninvasive marker for cirrhosis(5). In our study, all patients with HELLP syndrome has a APRI score higher than 3 points. We concluded that AST to platelet ratio index (APRI) more accurately predicted probability of HELLP syndrome as well. Lastly, we also found no difference prevalences both of hepatitis B surface antigen and hepatitis C antibody between groups. We postulated that viral hepatitis seropositivity is not a key driving factor to disease progression.

Conclusion: Seroprevalences both HCV and HBV is most similar inpregnancy to the healthy pregnant countrparts. Otherhand, both of increased D-dimer levels plus APRI scores can estimate HELLP syndrome as new diagnostic tools. Further more, HELLP syndrome appears to predispoe to renal failure independent of other diagnostic factors for HELLP. Further studies are needed to better understand the pathogenesis of HELLP syndrome and its diagnostic strategies. REFERENCE:

- 1-Wallace K, Harris S, Addison A, Bean C.HELLP Syndrome: Pathophysiology and Current Therapies. Curr Pharm Biotechnol. 2018 Jul 11. doi: 10.2174/1389201019666180712115215.
- 2- G, Kalish Y, Attari R, Abu Khatab A, Gil M, Rottenstreich A.Plasmapheresis-A life saving treatment for life threatening HELLP syndrome. Eur J Obstet Gynecol Reprod Biol. 2018 Aug 31. pii: S0301-2115(18)30955-2
- 3- Kongwattanakul K, Saksiriwuttho P, Chaiyarach S, Thepsuthammarat K.incidence, characteristics, maternal complications, and perinatal out comes associated with preeclampsia with severe featuresand HELLP syndrome. Int J Womens Health. 2018 Jul 17;10:371-377
- 4-Gutiérrez Garcíaet al.D-dimer during pregnancy: establishing trimester-specific reference intervals. Scand J ClinLabInvest. 2018 Jul 5:1-4. doi: 10.1080/00365513.2018.1488177. [Epubahead of print]
- 5- Tseng CH, et al. Acoustic Radiation Force Impulse Elasto graphy with APRI and FIB-4 to identify Significant Liver Fibrosis in Chronic Hepatitis B Patients. AnnHepatol. 2018 Aug 24;17(5):789-794.

THE RELATION BETWEEN TARGET ORGAN DAMAGE AND LEPTIN LEVELS IN PATIENTS WITH PRIMARY HYPERTENSION

<u>Nergiz ERKUT<sup>1</sup></u>, Kubra KAYNAR<sup>2</sup>, Sukru ULUSOY<sup>2</sup>, Birgul KURAL<sup>3</sup>, Merih KUTLU<sup>4</sup>, Hidayet ERDOL<sup>5</sup>, Murat TOPBAS<sup>6</sup>, Serkan OZTURK<sup>7</sup>, Mehmet KOLA<sup>5</sup>, Semih GUL<sup>8</sup>, Gulsum OZKAN<sup>9</sup>

#### **ABSTRACT**

Objectives: Leptin is thought to play a role in the pathogenesis of hypertension and target organ damage such as left ventricular hypertrophy, retinopathy and nephropathy. The purpose of the study was to evaluate the relation between serum leptin levels and target organ damage in patients with primary hypertension.

Material and Method: Twenty-eight patients with primary hypertension and 28 healthy individuals were included in the study. The relation between serum leptin levels and lipid profile, insulin resistance, target organ damage in hypertensive patients were assessed.

**Results:** Serum leptin levels were significantly higher in hypertensive patients compared to healthy individuals ( $10761\pm6440~pg/ml$ ,  $7020\pm4638~pg/ml$ , respectively, p=0.016). It was also higher in women with hypertension than in men with hypertension ( $14064\pm511~pg/ml$ ,  $6358\pm5402~pg/ml$ , respectively, p=0.001). Serum leptin levels have a positive correlation with body mass index, low-density lipoprotein cholesterol, and total cholesterol. However, no association was determined between serum leptin levels and insulin resistance, left ventricular hypertrophy, myocardial performance index, retinopathy or microalbuminuria and quantitative proteinuria in 24-h urine.

Conclusion: Leptin levels of hypertensive patients were found to be higher than healthy individuals. Because of small size of groups, no association of leptin and target organ damage could be directly showed.

**Key words:** Hypertension, leptin, insulin resistance, target organ damage

#### **Introduction**

Hypertension is one of the main global risk factor for morbidity and mortality (1). It currently affects approximately 1 billion people worldwide. Hypertension causes target organ damage by affecting the heart, brain, kidney, eye, and peripheral blood vessels (2,3). Effective reduction of blood pressure and treatment of cardiovascular risk factors such as hyperlipidemia,

<sup>&</sup>lt;sup>1</sup>Department of Internal Medicine, School of Medicine, Karadeniz Technical University, Trabzon.

<sup>&</sup>lt;sup>2</sup>Department of Nephrology, School of Medicine, Karadeniz Technical University, Trabzon,

<sup>&</sup>lt;sup>3</sup>Department of Biochemistry, School of Medicine, Karadeniz Technical University, Trabzon,

<sup>&</sup>lt;sup>4</sup>Department of Cardiology, School of Medicine, Karadeniz Technical University, Trabzon,

<sup>&</sup>lt;sup>5</sup>Department of Ophthalmology, School of Medicine, Karadeniz Technical University, Trabzon,

<sup>&</sup>lt;sup>6</sup>Department of Public Health, School of Medicine, Karadeniz Technical University, Trabzon,

Department of Cardiology, Afyonkarahisar Fair Hospital, Afyonkarahisar,

<sup>&</sup>lt;sup>8</sup>Department of Nephrology, Antalya Education and Research Hospital, Antalya

<sup>&</sup>lt;sup>9</sup>Department of Nephrology, Namik Kemal University, Tekirdag

smoking, and diabetes mellitus (DM) is crucial in the management chronic complications of hypertension (3,4).

Leptin is a 16 kDa peptide hormone consisting of 167 amino acids secreted from adipose tissue. It was first discovered in 1994 as an Ob gene product cloned from Ob/Ob mice. It regulates body weight by affecting the hypothalamus, reducing food intake and increasing energy consumption (5,6). Leptin contributes to the development of hypertension by activating the sympathetic nervous system, causing reabsorption of tubular sodium and reducing nitric oxide (NO) levels. It is also thought to play a role in hypertensive target organ damage such as left ventricular hypertrophy (LVH), retinopathy, and nephropathy (7). The purpose of this study was to evaluate the relation between serum leptin levels and target organ damage in patients with primary hypertension.

#### Materials and Methods

#### **Patients**

Twenty-eight newly diagnosed and untreated hypertensive patients (16 women, 12 men) presenting to the Karadeniz Technical University, Faculty of Medicine, Department of Nephrology, and 28 healthy individuals (16 women, 12 men) resembling the patient group in terms of age, sex, and body mass index (BMI) were included in the study. Patients with BMI > 30 kg/m², DM, heart failure, heart valve disease, coronary artery disease, familial hypercholesterolemia, chronic kidney disease, collagen tissue disease, or using oral contraception or long-term estrogen replacement therapy were excluded. Informed consent forms were obtained from all patients. The study protocol was approved by the Karadeniz Technical University local ethical committee.

Systolic and diastolic blood pressures were measured using the auscultatory aneroid method in accordance with international standards (8). Systolic blood pressure above 140 mmHg and diastolic blood pressure above 90 mmHg at least three times at one-week intervals were defined as hypertension (9).

#### Anthropometric measurements

BMI was calculated as weight (kg) divided by height squared (m²). The waist-hip ratio (WHR) was calculated as the ratio of waist circumference to hip circumference. Percentage body fat mass (BFM) was measured using a TANITA TBF-543 body fat monitor scale. Total body fat (TBF) was calculated using the formula BFM (%)/100 x body weight (kg) (10).

#### Laboratory measurements

The blood samples of the patients and healthy individuals were taken between 7:30 and 9:30 AM after a 12-h fast and resting at least 15 min. The levels of serum glucose, creatinine, triglyceride, total cholesterol, low-density lipoprotein cholesterol (LDL-C), and high-density lipoprotein cholesterol (HDL-C) were determined by an autoanalyzer (Beckman Coulter, AU 5811, Shizuoka, Japan) using their original reagents. Serum insulin concentrations were analyzed by chemiluminescence immunoassay method (Immulite 2000, DPC LA, USA). Insulin resistance was calculated using the homeostatic model assessment-insulin resistance (HOMA-IR) and the formula was as follow:

HOMA- $IR = fasting glucose (mg/dl) \times fasting insülin (µIU/ml)/405$ 

The cut-off limit of HOMA-IR was 2.5. HOMA-IR level above 2.5 was evaluated as insulin resistance but lower 2.5 as insulin sensitivity (11,12).

#### Leptin measurement

Serum leptin levels were analyzed with enzyme-linked immunosorbent assay (ELISA) using a human leptin ELISA kit (Cat# KAC2281; Invitrogen, Carlsbad, USA) according to the manufacturer's instructions. The detection limit of this assay was 3.5 pg/ml. Absorbance readings at 450 nm were taken using a VERSA max tunable microplate reader (Molecular Devices, California, USA). The leptin levels were determined from standard curves provided within the kit.

### Target organ damage assessment

A Vivid-7 1.7/3.4 MHz Doppler echocardiography device was used for cardiac evaluation. Interventricular septum thickness (IVST), posterior wall thickness (PWT), and left ventricular end-diastolic diameter (LVEDD) were measured using Doppler echocardiography. Left ventricular mass (LVM) was calculated using the Devereux formula (1.04 × [(LVEDD + PWT + IVST)^3 - LVEED^3] × 0.8 + 0.6) and left ventricular mass index (LVMI) was calculated by dividing LVM by body surface area. LVMI above 110 g/m² in women and 125 g/m² in men was defined as LVH (13,14). Isovolumic relaxation time (IVRT), isovolumic contraction time (IVCT), and ejection time (ET) were measured using Doppler echocardiography. The myocardial performance index (MPI) was calculated. Values greater than 0.39 ± 0.05 were regarded as abnormal (13).

The patients underwent fundus examination to assess hypertensive retinopathy. The pupils were firstly dilated with tropicamide 1% and phenylephrine HCL 2.5% eye solutions, and photographs were taken with a fundus camera CF-60 UV device. Retinopathy evaluation was performed with anterior and posterior segment examinations with a Nikon FS-3 biomicroscope using a Volk double spherical 90 diopter lens. Hypertensive retinopathy was classified according to the Keith-Wagener system (15).

For kidney function evaluations, microalbumin and quantitative protein values from 24-h urine were multiplied by 24-h urine volume and expressed as g/day. Glomerular filtration rate (GFR) was calculated by investigating creatinine from 24-h urine collections (16).

#### Statistical analysis

Compatibility with normal distribution of all parameters compared between the groups was determined using the Kolmogorov-Smirnov test to decide on the statistical method to be applied. Comparisons between two groups were analyzed with the Student's t-test for parametric data and Mann-Whitney U test for nonparametric data. Qualitative data were evaluated using the chi-square test. Pearson and Spearman correlation tests were used for correlation analysis. Data were expressed as arithmetic mean  $\pm$  standard deviations. p values < 0.05 were regarded as statistically significant.

#### Results

Sixteen women and 12 men, with a mean age of 46 years, were studied. Twenty-eight healthy individuals with similar age, sex, BMI, WHR, BFM and TBF to those of the patients were selected as the control group. Serum leptin levels of hypertensive patients were  $10761\pm6440$  pg/ml, compared to  $7020\pm4638$  pg/ml in healthy individuals. Serum leptin levels were significantly higher in hypertensive patients than in healthy individuals (p=0.016). Clinical characteristics of the patient and control groups are shown in Table 1.

The 10-year cardiovascular risk rate and triglyceride levels were higher in men with hypertension than in women with hypertension (9±4 %, 2±2 %, p=0.0001; 164±74 mg/dl, 104±44 mg/dl, p=0.023, respectively). BMI and BFM (not statistically significant) were higher in women with hypertension than in men with hypertension (27±1 kg/m², 26±2 kg/m² p=0.01; 29±6 %, 27±4 %, p>0.05, respectively). There was no statistically significant difference between

women and men patients with hypertension in terms of systolic and diastolic blood pressure, insulin resistance, LDL-C, HDL-C, total cholesterol, microalbumin and quantitative protein levels in 24-h urine, GFR, LVMI or MPI. Serum leptin levels were higher in women with hypertension than in men with hypertension ( $14064\pm5110$  pg/ml and  $6358\pm5402$  pg/ml, respectively, p=0.001) (Table 2). Serum leptin levels were also higher in hypertensive women compared to non-hypertensive women ( $14064\pm5110$  pg/ml and  $10181\pm3441$  pg/ml, respectively, p=0.017) and in hypertensive men compared to non-hypertensive men ( $6358\pm5402$  pg/ml and  $2805\pm1646$  pg/ml, respectively, p=0.048).

A higher 10-year cardiovascular risk rate and triglyceride levels were observed in hypertensive patients with insulin resistance compared to those with insulin sensitivity (8 $\pm$ 4.5 %, 3 $\pm$ 4 %, p=0.01; 169 $\pm$ 75 mg/dl, 104 $\pm$ 42 mg/dl, p=0.02, respectively). No statistically significant difference was determined between insulin resistant hypertensive patients and insulin sensitive hypertensive patients in terms of systolic and diastolic blood pressure, LDL-C, HDL-C, total cholesterol, microalbumin and quantitative protein in 24-h urine, GFR, LVMI, MPI or serum leptin levels (Table 3).

No significant relation was determined between serum leptin levels and microalbumin and quantitative protein in 24-h urine in patients with hypertension. In addition, no significant difference was observed in serum leptin levels between patients with no or Grade 1 retinopathy and patients with Grade 2 or 3 retinopathy (Table 4). LVH was present in five of 28 patients in our study. Therefore, the difference in serum leptin levels between subjects with and without LVH was not suitable for statistical analysis. MPI was above the cut-off value in hypertensive patients (>  $0.39 \pm 0.05$ ). Although MPI was higher in men than in women and in insulin resistant subjects than in insulin sensitive subjects, the differences were not statistically significant.

Although serum leptin levels were not correlated with WHR, BFM or TBF in hypertensive patients, positive correlation was observed with BMI, LDL-C and total cholesterol. However, no correlation was observed between serum leptin levels and age, systolic and diastolic blood pressure, insulin resistance, microalbumin and quantitative protein in 24-h urine, GFR, LVMI and MPI.

#### Discussion

Acute leptin infusion does not alter blood pressure and heart rate in association with compensatory mechanisms, but chronic leptin infusion has been shown to raise these (7,17). There are various opinions concerning the relation between leptin and hypertension. Agata et al. first reported higher leptin levels in hypertensive patients compared to healthy individuals (18). Similarly, Alison et al. showed that leptin increased systolic and diastolic blood pressure and heart rate independently of anthropometric measurements (19). In contrast, two other studies reported no relation between hypertension and leptin (20,21). In our study, we observed higher serum leptin levels in hypertensive patients compared to healthy individuals despite similar BMI, BFM and TBF values.

Various studies have reported higher leptin levels in women than in men (22,23). This difference between men and women depends particularly on variation in body fat levels and can also be affected by the biological features of hypothalamic and adipose tissue and hormonal variations (24). We observed higher serum leptin levels in hypertensive women than in hypertensive men. In addition, BMI and BFM (not statistically significant) was higher in women than in men. Therefore, we concluded that higher leptin levels in women may be associated with increased fat amounts.

Insulin resistance is a pathological condition associated with an impaired insulin effect in the liver, striated muscle, and adipose tissue and that causes an increase in cardiovascular

risk (25,26). Leptin synthesized from white adipose tissue has been shown to regulate insulin, lipid and glucose metabolism (25). A study of hypertensive patients reported higher leptin and insulin levels compared to healthy individuals (27). Similarly, Yadav et al. observed positive correlation between leptin and fasting and postprandial insulin levels and insulin resistance (25). In contrast, Ceddia et al. determined no effect of leptin on development of insulin resistance (28). In our study, no difference was determined in terms of serum leptin levels between insulin resistant and insulin sensitive subjects. This may be due to the low patient numbers.

Leptin has been shown to contribute to the development of atherosclerosis through hyperlipidemia, oxidative stress, vascular smooth muscle proliferation and calcification, and vascular elasticity impairment (29-32). Some studies have observed a positive relation between leptin and HDL and triglyceride levels (24,33,34). However, others have shown no association between leptin and lipid profile (35,36). We observed a positive correlation between serum leptin levels and total cholesterol and LDL-C. We therefore think that leptin may play an important role in the development of atherosclerosis by causing hyperlipidemia.

Leptin can cause deleterious cardiac effects by raising blood pressure and heart rate, but also prevents fat deposition and the accumulation of toxic lipids in the heart by regulating fatty acid and glucose metabolism (37). Although this has been reported to be associated with cardiovascular diseases such as LVH, systolic and diastolic dysfunction and myocardial infarction, the subject is still controversial (7, 38). In vivo studies have shown that leptin directly stimulates growth in heart muscle and causes hypertrophy (39). Paolisso et al. showed a positive correlation between myocardial wall thickness and leptin levels in hypertensive and insulin resistant men. They also concluded that leptin directly affects myocardial wall thickness by activating the sympathetic nervous system or increasing cell proliferation (40). Malmqvist et al. reported that leptin levels not constitute a risk for the development of LVH (41). Pladevall et al. also determined an negative correlation between LVMI and leptin levels in hypertensive patients with similar age, BMI, systolic blood pressure and insulin resistance (42). The difference in serum leptin levels between subjects with and without LVH could not be assessed because the number of patients with LVH was low. Nevertheless, no statistically significant correlation was determined between serum leptin levels and parameters indicating LVH. Diastolic dysfunction is frequently seen in hypertensive patients and known to be associated with an increased incidence of heart failure and cardiac mortality (43,44). Galderisi et al. showed a negative correlation between left ventricular diastolic function and leptin levels in hypertensive patients (45). In our study, MPI, a parameter showing systolic and diastolic function was above normal values in patients with hypertension. However, no statistically significant correlation was determined between serum leptin levels and MPI.

In an animal study, Wolf et al. showed that chronic leptin infusion increased the synthesis of collagen and transforming growth factor- $\beta l$  in glomerules and contributed to glomerular cell proliferation and proteinuria (46). But, we determined no statistically significant correlation between serum leptin levels and urinary protein excretion and GFR in hypertensive patients.

Hypertensive retinopathy occupies an important place in the assessment of cardiovascular risk (47). Sierra-Honigman et al. showed that leptin causes angiogenesis in the normal rat cornea in vivo (48). Üçkaya et al. observed higher leptin levels in patients with hypertensive retinopathy compared to patients without hypertensive retinopathy and also reported higher levels in subjects with Grade 2 hypertensive retinopathy compared to those with Grade 1 hypertensive retinopathy (49). However, we observed no significant difference in terms of serum leptin levels between subjects with Grade 0 and 1 hypertensive retinopathy and those with Grade 2 and 3 hypertensive retinopathy.

As a result, in our study, serum leptin levels were higher in hypertensive patients compared to healthy individuals, and in women compared to men. In addition, serum leptin levels were positively correlated with BMI, total cholesterol and LDL-C. Serum leptin levels were seen to play no direct role in hypertension-related target organ damage, such as left ventricular dysfunction, nephropathy, and retinopathy. In the light of these findings, it may be concluded that leptin causes target organ damage indirectly by giving rise to the development of hypertension. However, further research with larger patient numbers is needed.

## Conflict of interest

The authors declare no conflict of interest

#### References

- 1. Kjeldsen SE. Hypertension and cardiovascular risk: General aspects. Pharmacological Researc 2017; pii: S1043-6618:31118-0.
- 2. Mensah GA. Hypertansion and Target Organ Damage: Dont't Believe Everything You Think! Ethn Dis 2016; 26: 275-8.
- 3. Abegaz TM, Tefera YG, Befekadu Abebe T. Target Organ Damage and the Long Term Effect of Nonadherence to Clinical Practice Guidelines in Patients with Hypertension: A Retrospective Cohort Study. Int J Hypertens 2017; 2017: 2637051.
- 4. Czernichow S, Zanchetti A, Turnbull F, et al. The effects of blood pressure reduction and of different blood pressure-lowering regimens on major cardiovascular events according to baseline blood pressure: meta-analysis of randomized trials. J Hypertens 2011; 29: 4–16.
- 5. Bell BB, Rahmouni K. Leptin as a Mediator of Obesity-Induced Hypertension. Curr Obes Rep 2016; 5: 397-404.
- 6. Zhang Y, Proenca R, Maffei M, Barone M, Leopold L, Friedman JM. Positional cloning of the mouse obese gene and its human homologue. Nature 1994; 372: 425-32.
- 7. Beltowski J. Role of leptin in blood pressure regulation and arterial hypertension. J Hypertens 2006; 24: 789-801.
- 8. Leung AA, Nerenberg K, Daskalopoulou SS, et al. CHEP Guidelines Task Force. Hypertension Canada's 2016 Canadian Hypertension Education Program Guidelines for Blood Pressure Measurement, Diagnosis, Assessment of Risk, Prevention, and Treatment of Hypertension. Can J Cardiol 2016; 32: 569-88.
- 9. Chobanian AV, Bakris GL, Black HR, Cushman WC, Green LA, Izzo JL. The seventh report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure: The JNC 7 Report. JAMA 2003; 289: 2560-72.
- 10. Masuo K, Katsuya T, Ogihara T, Tuck M. Acuta hyperinsulinemia reduces plasma leptin levels in insulin-sensitive Japanese men. Am J Hypertens 2005; 18: 235-43.
- 11. Petrikis P, Tigas S, Tzallas AT, Papadopoulos I, Skapinakis P, Mavreas V. Parameters of glucose and lipid metabolism at the fasted state in drug-naive first-episode patients with psychosis: Evidence for insulin resistance. Psychiatry Res 2015; 229: 901-4.
- 12. Urakami T, Habu M, Kuwabara R, Komiya K, Nagano N, Suzuki J, Mugishima H. Insulin resistance at diagnosis in Japanese children with type 2 diabetes mellitus. Pediatr. Int 2012; 54: 516-9.
- 13. Oh JK, Seward JB, Tajık AJ: The Echo Manual. 3<sup>th</sup> Edition. Wolters Kluwer Lippincott Williams & Wilkins, 2006: pp. 113-116.

- 14. Mancia G, Backer GD, Dominiczak A, et al. The Task Force for the Management of Arterial Hypertension of the European Society of Hypertension (ESH) and of the European Society of Cardiology (ESC). Guidelins for the Management of Arterial Hypertension. J Hypertens 2007; 25: 1105-87.
- 15. Keith NM, Wagener HP, Barker NW. Some different types of essential hypertension: their course and their prognosis. Am J Med Sci 1974; 268: 336-45.
- 16. Clarkson MR, Brenner BM. Pocket Companion to Brenner & Rector's The Kidney.

  Edition, Harvard medical School, Elservier Saunders Boston Massachusetts, 2004;

  pp. 2024-63.
- 17. Shek EW, Brands MW, Hall JE. Chronic leptin infision increases arterial pressure. Hypertension 1998; 31: 409-14.
- 18. Agata J, Masuda A, Takada M. High plasma immunoreactive leptin levels in essential hypertension. Am J Hypertens 1997; 10: 1171-4.
- 19. Allison MA, Ix JH, Morgan C et al. Higher leptin is associated with hypertension: the Multi-Ethnic Study of Atherosclerosis. J Hum Hypertens 2013; 27: 617-22.
- 20. Kokot F, Adamczak M, Wiecek A, Cieplok J. Does leptin play a role in the pathogenesis of essential hypertension? Kidney Blood Pres Res 1999; 22: 154-60.
- 21. Narkiewicz K, Somers VK, Mos L, Kato M, Accurso V, Platini P. An independent relationship between plasma leptin and heart rate in untreated patients with essential hypertension. J Hypertens 1999; 17: 245-9.
- 22. Saad MF, Damani S, Gingerich RL, et al. Sexual dimorphism in plasma leptin concentration. J Clin Endocrinol Metab 1997; 82: 579-84.
- 23. Bennett FI, McFarlane-Anderson N, Wilks R, Luke A, Cooper RS, Forrester TE. Leptin concentration in women is influenced by regional distribution of adipose tissue. Am J Clin Nutr 1997; 66: 1340–4.
- 24.Mirrakhimov EM, Kerimkulova AS, Lunegova OS, et al. The association of leptin with dyslipidemia, arterial hypertension and obesity in Kyrgyz (Central Asian nation) population. BMC Res Notes 2014; 7: 411.
- 25. Yadav A, Jyoti P, Jain SK, Bhattacharjee J. Correlation of adiponectin and leptin with insülin resistance: a pilot study in healthy North India population. Indian J Clin Biochem 2011; 26: 193-6
- 26. Reaven G. Metabolic syndrome. Pathophysilogy and implications for management of cardiovascular disease. Circulation 2002; 106: 286-8.
- 27. Makris TK, Stavroulakis GA, Krepsi PG, et al. Elevated plasma immunoreactive leptin levels preexist in healthy offspring of patients with essential hypertension. An Heart J 1999; 138: 922-5
- 28. Ceddia RB, Kointinen HA, Zierath JR, Sweeney G. Analysis of paradoxical observations on the association between leptin and insulin resistance. FASEB J 2002; 16: 1163-76.
- 29. Parhami F, Tintut Y, Ballard A, Fogelman AM, Demer LL. Leptin enhances the calcifation of vascular cells: artery wall as a target of leptin. Circ Res 2001; 88: 954-60.
- 30. Oda A, Taniguchi T, Yokoyama M. Leptin stimulates rat aortic smooth muscle cell proliferation and migration. Kobe J Med Sci 2001; 47: 141-50.
- 31. Bouloumie A, Marumo T, Lafontan M, Busse R. Leptin induces oxidative stress in human endothelial cells. FASEB J 1999; 13: 1231-8.

- 32. Singhal A, Farooqi IS, Cole TJ, et al. Deanfield J. Influence of leptin on arterial distensibility: a novel link between obesity and cardiovascular disease? Circulation 2002; 106: 1919-24.
- 33. Rainwater DL, Comuzzie AG, VandeBerg JL, Mahaney MC, Blangero J. Serum leptin levels are independently correlated with two measures of HDL. Atherosclerosis 1997; 32: 237–43.
- 34. Leyva F, Godsland IF, Ghatei M,et al. Hyperleptinemia as a component of a metabolic syndrome of cardiovascular risk. Arterioscler Thromb Vasc Biol 1998; 18: 928–33.
- 35. Haluzik M, Fiedler J, Nedvidkova J, Ceska R. Serum leptin levels in patients with hyperlipidemias. Nutrition 2000; 16: 429–33.
- 36. Al-Shoumer KA, Anyaoku V, Richmond W, Johnston DG. Elevated leptin concentrations in growth hormone-deficient hypopituitary adults. Clin Endocrinol 2000; 47: 153–9.
- 37. Hall ME, Harmancey R, Stec DE. Lean heart. Role of leptin in cardiac hypertrophy and metabolism. World J Cardiol 2015; 7: 511-24.
- 38. Soderberg S, Ahren B, Jansson JH, et al. Leptin is associated with increased risk of myocardial infarction. J Intern Med 1999; 246: 409-18.
- 39. Abe Y, Ono K, Kawamura T, et al. Leptin induces elongation of cardiac myocyte and causes eccentric left ventricular dilatation with compensation. Am J Physiol Heart Circ Physiol 2007; 292: 2387-96.
- 40. Paolisso G, Tagliamonte MR, Galderisi M, et al. Plasma leptin concentration, insulin sensitivity, and 24-hour ambulatory blood pressure and left ventricular geometry. Am J Hypertens 2001; 14: 114-20.
- 41. Malmqvist K, Ohman KP, Lind L, Nystrom F, Kahan T. Relationships between left ventricular mass and the renin-angiotensin system, catecholamines, insulin and leptin. J Intern Med 2002; 252: 430-9
- 42. Pladevall M, Williams K, Guyer H, et al. The association between leptin and left ventricular hypertrophy: a population-based cross-sectional study. J Hypertens 2003; 21: 1467-73.
- 43.Zanchetti A, Cuspidi C, Comarella L, et al. Left ventricular diastolic dysfunction in elderly hypertensives: results of the APROS-diadys study. J Hypertens 2007; 25: 2158-67.
- 44. Redfield MM, Jacobsen SJ, Burnett JC Jr, Mahoney DW, Bailey KR, Rodeheffer RJ. Burden of systolic and diastolic ventricular dysfunction in the community: appreciating the skope of the heart failure epidemic. JAMA 2003; 289: 194-202.
- 45. Galderisi M, Tagliamonte MR, D'Errico A, et al. Independent association of plasma leptin levels and left ventricular isovolumic relaxation in uncomplicated hypertension. Am J Hypertens 2001; 14: 1019-24.
- 46. Wolf G, Hamann A, Han DC, Helmchen U, Thaiss F, Ziyadeh FN. Leptin stimulates proliferation and TGF-b expression in renal glomerular endothelial cells: potential role in glomerulosclerosis. Kidney Int 1999; 56: 860-72.
- 47. Chatterjee S, Chattopadhya S, Hope-Ross M, Lip PL. Hypertension and the eye: changing perspectives. J Hum Hypertens 2002; 16: 667-75.
- 48. Sierra-Honigmann MR, Nath AK, Murakami C, et al. Biological action of leptin as an anjiogenic factor. Science 1998;281:1683-6.
- 49. Uckaya G, Ozata M, Sonmez A,et al. Is leptin associated with hypertensive retinopathy? J Clin Endocrinol Metab 2000; 85: 683-7.

**Table 1:** Clinical characteristics of hypertensive patients and healthy individuals

|                             | Patients group (n:28) | Control group (n:28) | P value |
|-----------------------------|-----------------------|----------------------|---------|
| $Age\ (years)\ mean \pm SD$ | 46±7                  | 47±5                 | NS      |
| Gender (women/men) n, (%)   | 16(57%)/12(43%)       | 16(57%)/12(43%)      | NS      |
| $BMI(kg/m^2)$ mean $\pm SD$ | 27±2                  | 27±1                 | NS      |
| WHR mean $\pm SD$           | $0.93 \pm 0.07$       | $0.94 \pm 0.04$      | NS      |
| BFM (%) mean±SD             | 28±5                  | 27±2                 | NS      |
| $TBF$ (kg) mean $\pm SD$    | 21±5                  | 21±2                 | NS      |
| SBP (mmHg) mean±SD          | 159±11                | 121±7                | 0.016   |
| DBP (mmHg) mean±SD          | 102±6                 | 72±4                 | 0.0001  |
| Leptin (pg/ml) mean±SD      | $10761 \pm 6440$      | 7020±4638            | 0.016   |

SD, standard deviation; NS, not significant; BMI, body mass index; WHR, wait-hip ratio; BFM, body fat mass; TBF, total body fat; SBP, systolic blood pressure; DBP, diastolic blood pressure

Table 2: Clinical characteristics of hypertensive women and men patients

|   | Women (n: 16)     | Men (n: 12)      | P value           |
|---|-------------------|------------------|-------------------|
| Age (years) mean ±SD                    | 47±7              | 45±7             | NS                |
| $BMI(kg/m^2)$ mean $\pm SD$             | 27±1              | 26±2             | 0.01              |
| WHR mean ±SD                            | $0.91 \pm 0.78$   | $0.95 \pm 0.71$  | NS                |
| BFM (%) mean ±SD                        | 29±6              | 27±4             | NS                |
| $TBF(kg)$ mean $\pm SD$                 | 21±6              | 22±5             | NS                |
| $SBP$ ( $mmHg$ ) $mean \pm SD$          | 160±10            | 158±13           | NS                |
| $DBP$ ( $mmHg$ ) $mean \pm SD$          | 101±4             | 103±7            | NS                |
| HOMA-IR mean±SD                         | $2\pm 1$          | 3±2              | NS                |
| CVR (%) mean±SD                         | 2±2               | 9±4              | 0.0001            |
| Total cholesterol (mg/dl) mean±SD       | 203±27            | 191±44           | NS                |
| Triglyceride (mg/dl) mean±SD            | $104 \pm 44$      | $164 \pm 74$     | 0.023             |
| LDL-C (mg/dl) mean±SD                   | 135±23            | 130±42           | NS                |
| HDL-C (mg/dl) mean±SD                   | 58±14             | 48±12            | NS                |
| $GFR$ (ml/dk) mean $\pm SD$             | 124±29            | 125±29           | NS                |
| Microalbumin (g/day) mean±SD            | $2\pm6.2$         | $3.3 \pm 6.3$    | NS                |
| Quantitative protein (g/day) mean±SD    | $0.03 \pm 0.1$    | $0.14 \pm 0.5$   | NS                |
| IVST (cm) mean±SD                       | $1.02 \pm 0.14$   | $1.05 \pm 0.09$  | NS                |
| PWT (cm) mean±SD                        | $0.96 \pm 0.13$   | $1.03 \pm 0.12$  | NS                |
| LVEDD (cm) mean±SD                      | $4.58 \pm 0.38$   | 5±0.43           | 0.011             |
| $LVMI(gr/m^2)$ mean $\pm SD$            | $95.82 \pm 19.9$  | $90.47 \pm 23.4$ | NS                |
| MPI mean±SD                             | $0.51 \pm 0.08$   | $0.81 \pm 0.89$  | NS                |
| Leptin (pg/ml) mean±SD                  | 14064±511         | 6358±5402        | 0.001             |
| SD standard deviation: NS not signified | ant. DMI body man | indox. WHD       | ait hip nation DE |

SD, standard deviation; NS, not significant; BMI, body mass index; WHR, wait-hip ratio; BFM, body fat mass; TBF, total body fat; SBP, systolic blood pressure; DBP, diastolic blood pressure; HOMA-IR, homeostatic model assessment-insulin resistance; CVR, cardiovascular risk rate; LDL-C, low-density lipoprotein cholesterol; HDL-C, high-density lipoprotein cholesterol; GFR, glomerular filtration rate; IVST, interventricular septum thickness; PWT, posterior wall thickness; LVEDD, left ventricular end-diastolic diameter; LVMI, left ventricular mass index; MPI, myocardial performance index

Table 3: Clinical characteristics of insulin resistant and insulin sensitive patients

|                                       | Insulin resistant (n: 11) | Insulin sensitive (n: 17) | p value |
|---------------------------------------|---------------------------|---------------------------|---------|
| Age (years) mean ±SD                  | 45±8                      | 47±6                      | NS      |
| $BMI(kg/m^2)$ mean $\pm SD$           | 26±2                      | 27±2                      | NS      |
| WHR mean ±SD                          | $0.96 \pm 0.05$           | $0.91 \pm 0.086$          | NS      |
| BFM (%) mean ±SD                      | 29±5                      | 29±5                      | NS      |
| TBF (kg) mean ±SD                     | 22±6                      | 20±4                      | NS      |
| SBP (mmHg) mean ±SD                   | 159±13                    | 160±10                    | NS      |
| DBP (mmHg) mean ±SD                   | 101±4                     | 102±7                     | NS      |
| CVR (%) mean ±SD                      | 8±4.5                     | 3±4                       | 0.011   |
| Total cholesterol (mg/dl) mean ±SD    | 194±36                    | 200±35                    | NS      |
| Triglyceride (mg/dl) mean ±SD         | 169±75                    | 104±42                    | 0.020   |
| $LDL$ - $C$ ( $mg/dl$ ) $mean \pm SD$ | 132±32                    | 133±33                    | NS      |
| $HDL	ext{-}C\ (mg/dl)\ mean\ \pm SD$  | <i>50</i> ± <i>18</i>     | 56±10                     | NS      |
| GFR (ml/dk) mean±SD                   | 122±25                    | 126±32                    | NS      |
| Microalbumin (g/day) mean±SD          | 1.4±3.2                   | 3.2±7.4                   | NS      |
| Quantitative protein (g/day) mean±SD  | $0.016 \pm 0.05$          | $0.03 \pm 0.12$           | NS      |
| IVST (cm) mean±SD                     | $1.08 \pm 0.09$           | 1±0.13                    | NS      |
| PWT (cm) mean±SD                      | $1.05 \pm 0.13$           | $0.94 \pm 0.11$           | 0.033   |
| LVEDD (cm) mean±SD                    | 5±0.39                    | 4.6±0.42                  | 0.020   |
| $LVMI (gr/m^2) mean\pm SD$            | 87.1±13.96                | 97.7±24.3                 | NS      |
| MPI mean±SD                           | $0.84 \pm 0.87$           | 0.5±0.13                  | NS      |
| Leptin (pg/ml) mean±SD                | 10450±5748                | 10963±7017                | NS      |

SD, standard deviation; NS, not significant; BMI, body mass index; WHR, wait-hip ratio; BFM, body fat mass; TBF, total body fat; SBP, systolic blood pressure; DBP, diastolic blood pressure; CVR, cardiovascular risk rate; LDL-C, low-density lipoprotein cholesterol; HDL-C, high-density lipoprotein cholesterol; GFR, glomerular filtration rate; IVST, interventricular septum thickness; PWT, posterior wall thickness; LVEDD, left ventricular end-diastolic diameter; LVMI, left ventricular mass index; MPI, myocardial performance index

*Table 4:* Relations between serum leptin levels and grade 0-1 and 2-3 retinopathy

|                        | 0-1 retinopathy (n: 15) | 2-3 retinopathy (n: 13) | p value |
|------------------------|-------------------------|-------------------------|---------|
| Leptin (pg/ml) mean±SD | 12477±6490              | 8780±6021               | NS      |

SD, standard deviation; NS, not significant

# TIRNAK BATMASI HASTALARINDA KLİNİK VE SOSYODEMOGRAFİK ÖZELLİKLER

İbrahim Etem ARICA, Seher BOSTANCI\*, Pelin KOÇYİĞİT\*, Deniz AKSU ARICA\*\*

Trabzon Kanuni Eğitim ve Araştırma Hastanesi, Dermatoloji Kliniği, Trabzon Ankara Üniversitesi Tıp Fakültesi, Deri ve Zührevi Hastalıklar Anabilim Dalı, Ankara\* Karadeniz Teknik Üniversitesi Tıp Fakültesi, Deri ve Zührevi Hastalıklar Anabilim Dalı, Trabzon\*\*

Tırnak batması dermatoloji polikliniklerinde sık karşılaşılan ve hastaların iş, sportif ve günlük hayatlarında aksamalara neden olabilen, hasta için çok rahatsızlık verici ve ağrılı bir durumdur. Tırnak batması, hastalarda neden olduğu ağrı dolayısıyla hastaların günlük hayatında, çalışma ve sosyal yaşamında oluşturabileceği aksaklıklar nedeniyle önemli bir sağlık sorunudur. Bu konuyla ilgili yapılan çalışmalara bakıldığında, çoğunluğunun tırnak batmasının tedavisi üzerine yoğunlaştığı görülmektedir. Tırnak batmasının klinik ve sosyo-demografik özellikleri ile ilgili kapsamlı çalışmalara fazla rastlanmamaktadır.

Dermatoloji polikliniklerinde sıkça karşılaşılan bir durum olan tırnak batması, genellikle ayak başparmağında ve genç erişkinlerde görülmektedir. Normalde tırnak oluğundaki yumuşak doku ile tırnak kenarları temas halinde değildir. Ancak tırnak batmasına neden olan ya da kolaylaştıran faktörlerin bir araya gelmesiyle, lateral tırnak oluğu ile tırnak cismi arasındaki oran bozulur. Tırnak lateral kenarı, tırnak lateral kıvrımına doğru büyür veya itilir. Bu durum başlangıçta hastada ağrıya neden olurken, sürecin devam etmesi ile yabancı cisim reaksiyonları, bakteriyel enfeksiyonlar, drenaj ve abse formasyonları oluşur. Son aşamada lateral tırnak kenarında hipertrofi ve piyojenik granulom gelişir. Hastalarda batmaya bağlı şiddetli ağrı, yürümede zorluk, günlük hayatta, çalışma ve sosyal yaşamda aksama izlenebilmektedir.

Tırnak batmasının klinik ve sosyo-demografik özellikleri ile bu duruma neden olan ya da kolaylaştıran faktörlerin iyi araştırılması ve bilinmesi, hem daha sonradan yaşanabilecek nüksleri önlemeye, hem de bu faktörlerin ortadan kaldırılmasıyla, erken dönemdeki tırnak batmasının konservatif yöntemlerle tedavi edilebilmesine imkan tanıyabilecektir.

## GEREC VE YÖNTEM

Çalışmamızda 1 Mayıs 2000 - 31 Temmuz 2005 tarihleri arasında Ankara Üniversitesi Tıp Fakültesi Dermatoloji Anabilim Dalına, tırnak batması şikayetiyle başvuran 268 hastanın, klinik ve sosyodemografik özellikleri değerlendirildi ve tırnak batmasına neden olabilecek ya da gelişimini kolaylaştırabilecek faktörler incelendi. Tanımlayıcı istatistiksel veriler, pediatrik (0-18 yaş) ve erişkin (18 yaş üzeri) dönem için ayrı ayrı SPSS paket programı ile değerlendirildi. İki grup için elde edilen istatistiki değerler Ki-kare ve Mann-Whitney testleri kullanılarak sonuçlar arasında istatistiksel olarak anlamlı fark olup olmadığına bakıldı.

#### BULGULAR

- 268 hastanın 62'si pediatrik yaş grubunda, 206'sı erişkin yaş grubunda olarak değerlendirildi. Hastaların yaşları 3 ile 77 arasında değişiyordu, tırnak batmasının en sık 2.ve 4. dekadlar arasında oluştuğu izlendi (Ortalama yaş 33).
- Pediatrik yaş grubundaki hastaların %51.6'sı erkek, erkek/kadın oranı 1.06 idi. Erişkin yaş grubundaki hastaların %59.3'ü kadın, kadın/erkek oranı 1.45 idi.
- Hastaların meslekleri değerlendirildiğinde, en sık olarak öğrenci (%34.3), ev hanımı (%24.2) ve memurlarda (masa işi) (%23.8) tırnak batması görüldü.

- Hiperhidrozis pediatrik yaş grubunda %12.9, erişkin yaş grubunda %16.8 oranında izlendi. İki grup arasında istatiksel olarak anlamlı fark saptanmadı.
- Pediatrik yaş grubunda %9.7, erişkin yaş grubunda ise %34.1 oranında obeziteye rastlandı. İki grup arasında istatistiksel olarak anlamlı fark mevcuttu (p < 0.001).
- Pediatrik yaş grubunda %36.1, erişkin yaş grubunda %24.3 oranında travma hikayesi mevcuttu. İki grup arasında istatistiksel olarak anlamlı farka rastlanmadı.
- Pediatrik yaş grubunda %29, erişkin yaş grubunda %46.2 oranında dar uçlu ayakkabı giyme hikayesine rastlandı. İki grup arasında istatistiksel olarak anlamlı fark saptandı (p=0.017).
- İnternal basıya neden olabilecek lezyon yönünden değerlendirildiklerinde pediatrik yaş grubunda %1.6 oranında malforme falankslara rastlanırken, erişkin yaş grubunda %1.1 oranında malforme falankslar, %0.5 oranında subungual lezyonlar izlendi.
- Birliktelik gösteren sistemik hastalıklar açısından değerlendirildiğinde, pediatrik yaş grubunda %1.7 oranında diabetes mellitus, erişkin yaş grubunda ise %7.5 oranında diabetes mellitus saptandı.
- İlaç kullanımı açısından sorgulandığında, sadece bir hastada metoprolol kullanımına bağlı kerpeten tırnak ve tırnak batması geliştiği izlendi.
- Pediatrik yaş grubunda hastaların %72.1'inin, erişkin yaş grubunda ise %73.5'inin tırnaklarını yuvarlak şekilde kestiği öğrenildi. İki grup arasında istatistiksel olarak anlamlı fark izlenmedi.
- Pediatrik yaş grubunda; %12,9 oranında daha önce en az bir kez tırnak çekiminin yapıldığı, erişkin yaş grubunda da %26,7 oranında en az bir tırnak çekimi yapıldığı görüldü. İki grup arasında istatistiksel olarak anlamlı fark bulunmadı.
- Pediatrik yaş grubunun %7.8'inde, erişkin yaş grubunun ise %2.9'unda ortopedik bozukluk saptandı. İstatistiksel olarak anlamlı fark bulunmadı.
- Erişkin yaş grubu hastalarının %14.3'ünde tırnak batması gebelik sonrası başlamıştı.
- Pediatrik yaş grubunda %37.3, erişkin yaş grubunda ise %20.5 oranında spor uğraşılarının olduğu tespit edildi. Her iki gruptaki sonuçlar istatistiksel olarak değerlendirildiğinde farkın anlamlı olduğu izlendi (p=0.014).
- Eşlik eden tırnak değişikliği yönünden değerlendirildiklerinde; her iki yaş grubunda da en sık subungual hiperkeratoza rastlandı (%26.1).
- Pediatrik yaş grubunda %15.7, erişkin yaş döneminde %7.6 oranında aile hikayesine rastlandı. İstatistiksel olarak anlamlı bir fark gözlenmedi.
- Pediatrik yaş grubunda %3.8, erişkin yaş grubunda ise %35.8 oranında tırnak plağında overkurvatür saptandı. İstatistiksel olarak fark anlamlı bulundu (p<0.001).
- Pediatrik yaş grubunun %4'ünde, erişkin yaş grubunun ise %9,9'unda laterale deviasyon izlendi. İki grup arasında istatistiksel olarak anlamlı fark bulunmadı.
- Hastaların %55.1'inde (Pediatrik yaş grubunda %70,9, erişkin yaş grubunda %50,2) şikayetlerin 1 yıl veya daha kısa süredir mevcut olduğu tespit edildi.
- 268 hastada toplam 904 tırnak batması (893'ü ayak parmaklarında, 11'i el parmaklarında) saptandı. Pediatrik yaş grubunda izlenen tüm tırnak batmaları ayak parmaklarında olup, bunların da hepsi birinci parmaklarda yerleşmekteydi (bir parmakta

%40.3, iki parmakta %59.7). Erişkin yaş grubunda da tırnak batmalarının %91.7'sinin bir (%45.1) ya da iki (%46.1) ayak parmağında olduğu izlendi.

- Erişkin yaş grubundaki tırnak batmalarının %39.8'i sağ ayak 1. parmakta, %41.5'i sol ayak 1.parmaktaydı. Pediatrik yaş grubunda ise tırnak batmalarının %50.2'si sağ ayak 1. parmakta, %49.8'i sol ayak 1. parmaktaydı.
- Ayak parmaklarında izlenmiş olan 893 tırnak batmasının 469'unun lateral kenarda (%52) olduğu görüldü (Pediatrik yaş grubunda %54.3, erişkin yaş grubunda %52).
- Her iki yaş grubunda ayak parmaklarında en sık evre 2 (pediatrik grupta %50.9, erişkin grupta %44.5), en az ise evre 3 (pediatrik grupta %22.8, erişkin grupta %14.1) tırnak batması izlendi (1). El parmaklarında da en sık evre 2 (%54.6) izlenip, evre 3'e hiç rastlanmadı.
- Ayak parmaklarında izlenen tırnak batmalarında, her iki yaş grubu içinde en sık izlenen tipin, tip 1 (pediatrik grupta %73.2, erişkin grupta %51.9), pediatrik grupta bunu tip 2'nin (%18.3) takip ettiği, erişkin yaş grubunda ikinci sıklıkta izlenen tipin ise tip 3 (%37.1) olduğu görüldü (2). El parmaklarındaki tırnak batmalarına bakıldığında ise 11 tırnak batmasının sadece 1'inde (%9.1) Tip 1 tırnak batması izlenirken, kalan 10 hastada (%90.9) Tip 3 tırnak batması görüldü.

### *TARTIŞMA*

Tırnak batması herhangi bir yaşta izlenebilen, ancak daha çok genç yetişkinlik döneminde ortaya çıkan ve tırnak lateral kenarının, tırnak lateral kıvrımı içine doğru büyümesi veya itilmesi sonucu gelişen bir klinik tablodur. Çalışmamızda da gösterildiği gibi yetişkin dönemde tırnak batmasının daha fazla izlenme nedeninin, aktif iş ve sportif yaşam, hiperhidrozis ya da bayanların doğurganlık çağında oluşu ile ilgili olduğu düşünülmektedir (3).

Tırnak batmasıyla ilgili yapılan çalışmalarda, cinsiyetler arasında sıklık açısından veriler çelişkilidir. Bizim çalışmamızda erişkin dönemde tırnak batması, kadınlarda erkeklerden 1.45 kat daha fazla görülmüştür, bu Türk kadınlarının vücut kitle indekslerinin fazla olmasına, uygun olmayan ayakkabı seçimlerine ve gebelik sayılarının daha fazla oluşuna bağlanabilir.

Tırnak batması ile ilgili literatürlere bakıldığında bahsedilen etyolojik faktörlerden birisi de hastaların spor uğraşılarıdır (3). Özellikle pediatrik yaş grubunda spor uğraşının daha fazla olması ve tırnak batmasına eğilim yaratabilecek diğer faktörlerin erişkin yaşa oranla daha az olması, spor uğraşılarının pediatrik yaş grubunda izlenen tırnak batmalarının önemli bir nedeni olabileceğini düşündürmektedir.

Çalışmamızda hiperhidrozis insidansı topluma göre belirgin oranda yüksek bulunmuştur. Hiperhidrozis masserasyona neden olarak ayak hijyenini bozmakta bu da ayakta enfeksiyonlara neden olabilmektedir. Enfeksiyonların yol açtığı ödem de tırnak batmasını kolaylaştırmaktadır.

Tırnak batmasına neden olduğu bilinen en önemli faktörlerden birisi uygun olmayan ayakkabı ve çorap seçimleridir. Parmakları sıkan ayakkabı veya çoraplar, tırnağın lateral kısmına basınç uygulayarak bu kısımların yumuşak dokuya penetre olmasına neden olmaktadır (3).

Obezite, gebelik ve tırnak yatağında internal bası yapabilecek nedenler ve ayak biyomekaniğini bozan ortopedik bozukluklar, ayağa olan travmalar, tırnak plağı ile tırnak yatağı arasındaki basıncı artırabilmekte bu da tırnak batmasını kolaylaştırabilmektedir (4).

Çalışmamızda tırnak batmasıyla ilgili olabilecek sistemik hastalıklar açısından hastalar sorgulandığında, en fazla dikkati çeken hastalık diabetes mellitus oldu. Diabetli hastalarda bakteriyel ve fungal enfeksiyonların sık izlenmesinin tırnak batmasına eğilim yarattığı düşünülmektedir. Ayrıca diabetik hastalardaki vaskülopatinin kan dolaşımını bozarak tırnak plağında kalınlaşmaya neden olabildiği bildirilmektedir (3,4).

Tırnak kesim şekliyle tırnak batması arasındaki ilişki, çalışmamızda da gösterildiği gibi, pek çok literatürde ifade edilmiş olup, etyolojik faktörler içerisinde en sık izlenen nedenlerden birisidir (4,5). Tırnağın lateral kesiminin açılı bir şekilde kesilmesi spikül oluşumuna sebep olmaktadır. Tırnak rejenere oldukça spikül distal lateral tırnak kıvrımına gömülmekte böylece yabancı cisim reaksiyonu oluşmaktadır. Tırnağı çok kısa ya da eğimli kesmek, tırnak köşelerinin daha proksimalde yer almasına ve bu köşelerin tırnak kıvrımından derinin içine doğru büyümesine neden olmaktadır.

İlaçlarla tırnak batması arasındaki ilişkiden birkaç literatürde bahsedilmiştir. Çalışmamızda da beta blokör kullanmına bağlı pincer nail ve buna bağlı tırnak batması gelişen bir hasta mevcuttu. Bu hastada ilaç kesildikten sonra tırnak deformitesinin düzeldiği izlendi.

Tırnak batmaları en sık ayak başparmaklarında görülmektedir, bunun adım atma sırasında ağırlığın büyük oranda başparmak tarafından yüklenilmesi nedeniyle olduğu düşünülmektedir. Bu güç, yumuşak dokuların tırnağın distal kısmı çevresinde yukarıya doğru itilmesine neden olmaktadır. Ayrıca ayak parmaklarında medio-lateral konveksite nedeniyle el parmaklarına oranla tırnak plağının daha büyük bir kısmı lateral tırnak kıvrımıyla örtülü durumdadır. Bunun yanında ayak tırnaklarında matriks terminal falanks üzerinde yarım daire oluşturacak şekilde kıvrılmış durumdadır (6).

Tırnak batması özellikle lateral kenarda daha fazla görülmektedir (2). Ayak başparmağı ayaktayken medial rotasyon yapıp, ayak yerden kalktıktan sonra eski haline dönmektedir. Bu sırada tırnak cismi laterale doğru hareket etmekte, bu nedenle tırnak batmaları lateral kenarlarda daha sık görülmektedir. Ayrıca ayakkabı içinde 2.parmak 1.parmağın lateral kenarına doğru itilmekte, böylece tırnağın lateral kenarı boyunca basınç artmaktadır. Bu da tırnak batmasını kolaylaştırmaktadır (5).

Hastalarımızın ayak tırnaklarında en sık Tip1 tırnak batması saptandı, bu tipte, tırnağın yanlış kesilen parçası, yumuşak doku altına doğru büyümekte, böylece tırnak kenarında inflamasyon ve irritasyon gelişmektedir bu da yanlış tırnak kesiminin tırnak batmasındaki önemini vurgulamaktadır.

Tırnak batmasının klinik ve sosyo-demografik özellikleri ile tırnak batmasına neden olan ya da kolaylaştıran faktörlerin iyi araştırılması ve bilinmesi, hem daha sonradan yaşanabilecek nüksleri önlemeye, hem de bu faktörlerin ortadan kaldırılmasıyla, erken dönemdeki tırnak batmasının konservatif yöntemlerle tedavi edilmesine imkan tanımaktadır.

#### KAYNAKLAR

- 1. Dawber RPR, Baran R, de Berker D. Disorders of nails. In Textbook of Dermatology. Ed. Champion RH, Burton JL, Burns DA, Breatnanch SM. 6th ed. Oxford: Blackwell-Science Ltd,1998:2815-22.
- 2. Ross WR. Treatment of the ingrown toenail and a new anesthetic method. Surgical Clinics of North America, 1969;49:1499-1505.
- 3. Zuber T.J., PfhennigerJ.L. Management of ingrown toenails. American family physician. 1995;52(1):181-188.
- 4. Siegle RJ, Stewart R. Recalcitrant ingrowing nails. Surgical approaches. J Dermatol Surg Oncol 1992;18:744-52.
- 5. Günal I., Koşay C. ve ark.. Relationship Between Onychocryptosis and Foot Type and Treatment with Toe Spacer A Preliminary Investigation. Journal of the American Podiatric Medical Association. 2003; 93(1): 33-36.
- 6. Ditre CM, Howe NR. Surgical anatomy of the nail unit. J Dermatol Surg Oncol 1992; 18: 665-71.

# EVALUATION OF SATISFACTION IN PATIENTS ATTENDING TO PRIMARY HEALTH CARE CENTERS IN SAMSUN

## Cubukcu Mahcube

Health Sciences University Samsun Education and Research Hospital, Department of Family Medicine

Aim: Evaluation of patient perspective is necessary in primary care. Our aim was to explore the factors and practice of family practice on the patient satisfaction on primary health care in Samsun.

Methods: Turkish version of the EUROPEP was administered to patients in five different rural and urban primary health care centers in December 2006 and September 2007. Primary care physicians were visited for the study in five day medical practices, twice for each day. Every day, a minimum of 10 patients who visited primary care, were consecutively included the study after the informed consent. The patients were asked about demographic details and 23 questions in EUROPEP with a rating scale 1-5 (bad to excellent). Demographic data and results were evaluated.

**Results:** Of the 580 patients, 389 (67.1%) were female, 191 (32.9%) were male. Total 383 were adults, parents were interviewed in pediatric group. "Providing quick services for urgent health problems" is evaluated worst with  $2.13 \pm 1.32$ . "The doctor listened to me" was the best with  $4.45 \pm 0.71$ . Seven EUROPEP domains improved after family medicine practice in Samsun (Table 1). These domains were "explanation of the tests and therapies", "appointment system", "getting through to the doctor and practice on the telephone", "providing quick services for urgent health problems", "appropriate referral to specialist" and "waiting time". Means of five domain scores decreased after the project: "Interest in your personal situation", "involving you in decisions about your medical care", "listening to you", "keeping your records and data confidential", "thoroughness". Female patients (three domains 0.02 ) and the patients with chronic diseases (seven domains <math>0.00 ) were more satisfied. Educational status had negative correlation with patient satisfaction (19 domains <math>0.00 ).

Conclusion: These results show that patient satisfaction increased in some domains of the EUROPEP and decreased in some others. Because six months period is early, the study will be continued to evaluate the long term effects on patient satisfaction.

**Key words**: EUROPEP, quality, patient satisfaction, primary care, family medicine, general practice

## Introduction

An important issue in healthcare is the patient satisfaction. Patient satisfaction consists of a combination of patients' expectations regarding healthcare providers and actual experiences. The patient-centered health care system is designed to meet patient expectations, needs and priorities <sup>2</sup>. The quality of healthcare services is measured by the evaluation of patient satisfaction <sup>3</sup>, <sup>4</sup>.

In order to provide a quality health service, we need to know the patient's feelings and thoughts as well as the details about the disease. The best way to learn the ideas of patients is to use

systematic evaluation tools designed for this purpose. EUROPEP (European Patient Evaluate General/Family Practice) scale was developed by EQUIP (European Association for Quality in General Practice/Family Medicine) and used for evaluating physicians and clinics in various European countries for three years. It is an internationally recognized scale whose validity and reliability studies were conducted in sixteen European countries. It provides feedback to physicians and allows them to compare themselves to the national and international norms. In fact, physicians who use the EUROPEP scale in their practice in Switzerland and France are continuously given medical education points by professional organizations <sup>5</sup>.

Our aim was to investigate the factors affecting patient satisfaction and the impact of family medicine practice in Samsun.

#### Methods

The study was conducted between 01 December 2006 and 30 September 2007 in Samsun province. Primary care physicians were visited for the study in five day medical practices, twice for each day. Every day, a minimum of 10 patients who visited primary care, were consecutively included the study after the informed consent. Demographic data and results were evaluated. These include age, gender, social insurance, civil, marital status, educational status and presence of chronic diseases. The patients were asked about demographic details and 23 questions in EUROPEP with a rating scale 1-5 (bad to excellent).

Ondokuz Mayis University Clinical Research Ethical Committee approval was granted for the study. The data were evaluated using the SPSS 20.00 package program. The distribution of the data was evaluated by the Student t and Pearson's Chi-Square test. Statistical significance was accepted at p < 0.05.

#### Results

Of the 580 participants who participated in the study, 67.1% (n=389) were female and 32.9% (n=191) were male. The mean age of the patients was  $31.18\pm20.14$  years. 55.0% (n=319) of the patients were married. 98.4% (n=571) of the patients had social insurance. 28.1% (n=163) of the individuals graduated from primary school. 40.5% (n=235) of the patients had chronic diseases.

"Providing quick services for urgent health problems" is evaluated worst with  $2.13 \pm 1.32$ . "The doctor listened to me" was the best with  $4.45 \pm 0.71$ .

The scores of the answers given by those with chronic diseases to the following questions were found to be significantly higher than the scores given by those without any disease. These questions are "Making you feel you had time during consultation" (4.14  $\pm$  0.82 vs. 4.38 $\pm$  0.73, p=0.015), "Interest in your personal situation" (4.19 ± 0.80 vs. 4.49 ± 0.68, p=0.001), "Making it easy for you to tell him or her about your problem" (4.26  $\pm 0.79$  vs.  $4.51\pm 0.64$ , p=0.006), "Involving you in decisions about your medical care" (4.12  $\pm$  0.89 vs. 4.36  $\pm$  0.85, p=0.032), "Listening to you"  $(4.24 \pm 0.80 \text{ vs. } 4.50 \pm 0.68, p=0.005)$ , "Knowing she/he had done or told you during consultation" (3.89  $\pm$  0.99 vs. 4.32  $\pm$  0.82, p=0.001), "The helpfulness of the staff"  $(3.94 \pm 0.89 \text{ vs. } 4.17 \pm 0.92, p=0.041)$ , "Waiting time"  $(3.42 \pm 0.85 \text{ vs. } 3.66 \pm 0.95, p=0.031)$ Seven EUROPEP domains improved after family medicine practice in Samsun. These domains were "Explaining of the tests and therapies", "Appointment system", "Getting through to the doctor and practice on the telephone", "Providing quick services for urgent health problems", "Appropriate referral to specialist" and "Waiting time". Means of five domain scores decreased after the project: "Interest in your personal situation", "Involving you in decisions about your medical care", "Listening to you", "Keeping your records and data confidential", "thoroughness" (Table 1).

**Table 1:** Comparison of EUROPEP scores before and after family medicine practice (n=580)

| EUROPEP questions   | Time                      | Mean                 | Standard<br>Deviation | P value |
|---|---------------------------|----------------------|-----------------------|---------|
| Making you feel you had time during consultation?                           | Before<br>After           | 4.42<br>4.24         | 0.78<br>0.80          | 0.060   |
| Interest in your personal situation?  | Before<br>After           | 4.50<br>4.30         | 0.70<br>0.77          | 0.010   |
| Making it easy for you to tell him or her about your problem?               | Before<br>After           | 4.47<br>4.36         | 0.71<br>0.75          | 0.053   |
| Involving you in decisions about your medical care?                         | Before<br>After           | 4.42<br>4.22         | 0.80<br>0.88          | 0.033   |
| Listening to you?   | Before<br>After           | 4.56<br>4,34         | 0.64<br>0,77          | 0.001   |
| Keeping your records and data confidential?                                 | Before<br>After           | 4.52<br>4.08         | 0.73<br>0.95          | 0.000   |
| Quick relief of your symptoms?  | Before<br>After           | 4.20<br>4.21         | 0.90<br>0.84          | 0.903   |
| Helping you to feel well so that you can perform your daily activities?     | Before<br>After           | 4.23<br>4.20         | 0.91                  | 0.705   |
| Thoroughness?   | Before<br>After           | 4.41<br>4.28         | 0.79                  | 0.046   |
| Physical examination of you?  | Before<br>After           | 4.04                 | 1.32<br>0.96          | 0.548   |
| Offering you services for preventing diseases?                              | Before<br>After           | 3.70<br>3.92         | 1.52<br>1.13          | 0.056   |
| Explaining the purpose of tests and therapies?                              | Before<br>After           | 3.61<br>4.26         | 1.51<br>0.83          | 0.000   |
| Telling you what you wanted to know about your symptoms and/or illness?     | Before<br>After           | 4.10<br>4.17         | 1.15<br>0.88          | 0.559   |
| Helping you deal with emotional problems related to your health status?     | Before<br>After           | 3.94<br>3.96         | 1.15<br>0.94          | 0.950   |
| Helping you understand the importance of following his or her advice?       | Before<br>After           | 4.10<br>4.06         | 1.08<br>0.89          | 0.514   |
| Knowing she/he had done or told you during consultation?                    | Before<br>After           | 4.07                 | 1.11<br>0.94          | 0.903   |
| Preparing you for what to expect from specialist or hospital?               | Before<br>After<br>Before | 2.32<br>3.56<br>3.88 | 1.56<br>1.11<br>1.11  | 0.000   |
| The helpfulness of the staff?   | After<br>Before           | 4.03<br>1.42         | 0.91                  | 0.078   |
| Getting an appointment to suit you?  Getting through to the practice on the | After<br>Before           | 3.50<br>1.52         | 1.06<br>1.17          | 0.000   |
| telephone?  Being able to speak to the general                              | After                     | 3.44                 | 1.00                  | 0.000   |
| practioner on the phone readily call the doctor?                            | Before<br>After           | 1.44<br>3.49         | 1.05<br>0.99          | 0.000   |
| Waiting time in waiting room?   | Before<br>After           | 3.31<br>3.52         | 1.12<br>0.89          | 0.021   |
| Providing quick services for urgent health problems?                        | Before<br>After           | 1.56<br>2.73         | 1.20<br>1.16          | 0.000   |

<sup>\*</sup>Student t test

It was found that the score for the question of "Getting through to the doctor and practice on the telephone" was lower in women than in men  $(1.32\pm0.86 \text{ vs. } 1.68\pm1.32 \text{ and } p=0.006)$ .

#### Discussion

The mean age of the patients in our study was  $31.20\pm5.60$  years, while the study of Grol et al., reported it as 50 years<sup>6</sup>. Al Sakkak et al., revealed that the patient satisfaction increased with age and decreased with education level <sup>7</sup>. We found that the patient satisfaction increased as the age of the patient raised.

It has been found that 40.6% of the participants had primary school degree or below (literate, not literate), whereas in the EUROPEP study of Pearsman et al., 21.3% of the patients were in same educational level <sup>8</sup>. The reason for the low level of education can be explained by the fact that the Health Center outside the Ciftlik FHC were placed in the slum areas of Samsun where people with low socioeconomic level live.

44.6% of the individuals who applied to the primary step health services had at least one known disease. In the study of Dimova et al., 54.5% of the people had chronic diseases <sup>9</sup>.

In the study carried out by the Ministry of Health, it can be seen that the situations with the highest dissatisfaction in Turkey are "Being able to speak to the general practice on the phone readily call the doctor", "Getting through to the practice on the telephone", and "Waiting time in waiting room" <sup>10</sup>. In our study, the lowest scores were obtained from "Being able to speak to the general practice on the phone readily call the doctor?", "Getting through to the practice on the telephone?", and "Waiting time in waiting room". In Kersnik's study that was made through the EUROPEP questions, the lowest satisfaction was obtained from "Waiting time in waiting room" with 26% <sup>11</sup>. Similarly, Dimova et al., reported that the lowest score came from "Waiting time in waiting room" (33.8 %) <sup>9</sup>.

The scores of "Physical examination of you", "Thoroughness" questions in Bostan et al., point out the highest level of satisfaction <sup>10</sup>. In our study, "Listening to you", "Making it easy for you to tell him or her about your problem" received the highest score.

When we look at the effect of gender on patient satisfaction in our study, the scores given for the following questions by female were significantly higher than male; "Making you feel you had time during consultation" "Making it easy for you to tell him or her about your problem", "Knowing she/he had done or told you during consultation". We observed that the satisfaction scores of women were higher for a question in the group-1 and for question in the group-2. In the EUROPEP study carried out by Milano et al., satisfaction scores does not differ according to patient sex <sup>12</sup>. In our study, more use of primary care services by women in each group have increased satisfaction among them.

### Conclusion

The highest score from the EUROPEP - TR questions was obtained from "Listening to you" (89.7%). There was a significant increase in EUROPEP scores of following questions after family medicine practice; "Interest your personal situation", "Listening to you", "Explaining the purpose of tests and therapies", "Preparing you for what to expect from specialist or hospital", "Involving you in decisions about your medical care?", "Getting an appointment to suit you", "Getting through to the practice on the telephone", "Being able to speak to the general practioner on the phone readily call the doctor", "Thoroughness", "Keeping your records and data confidential", "Waiting time in waiting room", "Providing quick services for urgent health problems". There was a significant relationship between satisfaction and age, sex, the presence of chronic disease. Monitoring the quality of patient care and patient satisfaction in the primary health care services and follow-up on country basis would be beneficial.

### References

- 1. Szecsenyi J, Goetz K, Campbell S, Broge B, Reuschenbach B.Is the Job Satisfaction of Primary Care Team Members Associated With Patient Satisfaction? BMJ Qual Saf.2011;
- 2. Ozkan O. Patient-Centered Approach In Health Care Services: Patient Involvement. Hitit University, Journal of Social Sciences. 2017;10(2):1759-69.
- 3. Allan J, Schattner P, Stocks N, et al. Does Patient Satisfaction of General Practice Chance over a Decade? BMC Fam Pract 2009;10:3.
- 4. Van Royen P, Rees CE, groenewegen P. Patient-centred interprofessional collaboration in primary care: challenges for clinical, educational and health services research. An EGPRN keynote paper. Eur J Gen Pract. 2014;20: 327-32.
- 5. Akturk Z, Dagdeviren N, Sahin E.M, Ozer C, Yaman H, Goktaş O, Filiz T.M, Topsever P, Onganer E, Aydın S, Yarış F, Maraş I. Patients evaluate physicians EUROPEP scale. DEU Journal of Medicine 2002,16 (3), 153-160.
- 6. Grol R, Wensing M, Mainz J, Jung HP, Ferreira P, Hearnshaw H, Hjortdahl Per, Olesen F, Reis S, Ribacke M, Szecsenyi J. Patients in Europe evaluate general practice care: an international comparison. British Journal of General Practice, 2000; 50 (460): 882-87.
- 7. Al-Sakkak MA, Al-Nowaiser NA, Al-Khashan HI, Al-Abdrabulnabi AA, Jaber RM. Patient satisfaction with primary health care services in Riyadh. Saudi Med J. 2008; 29(3):432-36.
- 8. Pearsman W, Jacobs N, De Maeseneer J, Seuntjens L. The Flemish version of a new European standardised outcome instrument for measuring patients' assessment of the quality of care in general practice. Arch Public Health 2002; 60: 39-58.
- 9. Dimova R, Stoyanova R, Keskinova D.The EUROPEP Questionnaire for Patient's Evaluation of General Practice Care: Bulgarian Experience. Croat Med J 2017,58: 63-74.
- 10. Bostan S, Havvatoglu K: According to EUROPEP Satisfaction Scale Family Medicine Family Medicine Satisfaction Survey in Gumushane. Gumushane University Journal of Health Sciences 2014,3(4):1067-78.
- 11. Kersnik J. An evaluation of patient satisfaction with family practice care in Slovenia. Int J Qual Health Care. 2000; 12 (2): 143-47.
- 12. Milano M, Mola E, Collechia G, Del Carlo A, Giancane R, Visentin G. et al: Validation of the Italian version of the EUROPEP Instrument for Patient Evaluation of General Practice Care. Eur J Gen Pract 2007,13: 92-4.

### SÖZEL 81

## GERİATRİK HASTALARDA PERKUTAN ENDOSKOPİK GASTROSTOMİ DENEYİMİMİZ

## İsmail AYDIN

Dr. Öğretim Üyesi, Giresun Üniversitesi Tıp Fakültesi, Genel Cerrahi Anabilim Dalı, 28100 Giresun/TÜRKİYE

### Amac:

Perkütan endoskopik gastrostomi, herhangi bir nedenle ağız yoluyla beslenemeyen gastrointestinal sistem fonksiyonları sağlam olan hastalarda uygulanan bir yöntemdir. Bu çalışmada perkütan endoskopik gastrostomi işlemi uyguladığımız geriatrik hastaları retrospektif olarak incelemeyi ve tecrübelerimizi sunmayı amaçladık.

#### Yöntem:

Giresun Üniversitesi Tıp Fakültesi Eğitim ve Araştırma Hastanesi Endoskopi Ünitesinde Ocak 2016- Haziran 2018 tarihleri arasında perkutan endoskopik gastrostomi işlemi uygulanan geriatrik hastalar rektospektif olarak incelendi.

## Bulgular:

Çalışmaya 63 hasta dahil edildi. Hastaların % 71.4'ü kadın, % 28.6'sı erkekti. Hastaların ortalama yaşı 83.1 idi. PEG endikasyonları arasında serebrovasküler olay (SVO) ve demans en sık sebepti. En sık komplikasyon peristomal kanama (%3.4) ve peristomal sızıntı (%3.6) idi. Üçüncü ay sağ kalım %64, birinci yıl sağ kalım %45 idi.

### Sonuç:

Dünya ve ülkemizde geriatrik insan nüfusu giderek artmaktadır. Oral alımı olmayan, uzun süreli beslenme desteği gereken geriatrik hastalarda perkütan endoskopik gastrostomi düşük komplikasyon oranlarına sahip, uygulaması kolay ve güvenli bir yöntemdir.

Anahtar Kelimeler: Perkutan endoskopik gastrostomi, geriatrik hastalar.

### **GİRİS**

Geriatri; 65 yaş ve üstü hastaların sağlık sorunları, hastalıkları, sosyal ve fonksiyonel yaşamları, yaşam kaliteleri, koruyucu hekimlik uygulamaları ve toplum yaşlanması ile ilgilenen bilim dalıdır.

Birleşmiş Milletler'in 2015 yılında yayınladığı raporda dünya genelinde 60 yaş üzeri nüfusun 2015 yılında 901 milyon iken, 2030'da %56 artışla 1.4 milyar olacağı tahmin edilmektedir (1). Nüfus projeksiyonlarındaki bu artış, kaçınılmaz olarak hastalık ve iş görmezlik halinin artması, buna bağlı sağlık hizmetleri gereksiniminin de artması demektir (2). Türkiye İstatistik Kurumu verilerine göre ülkemizde 65 yaş üzeri nüfus 2013 yılında %7.7 iken, nüfus projeksiyonlarına göre 2023'de %10.2'ye ve 2050'de %20.8'e ulaşacağı öngörülmektedir (8). Ülkemizde yaşlı nüfus artış hızı, diğer yaş gruplarına ve toplam nüfus artışına göre 3 kat daha fazladır(8).

Perkütan endoskopik gastrostomi (PEG) herhangi bir nedenle ağızdan beslenemeyen, gastrointestinal fonksiyonları normal olan hastalarda uygulanan bir beslenme tekniğidir. Bu işlem 1980'den beri güvenli bir şekilde yapılmaktadır. Bu yolla beslenmenin sürdürülmesi ile mukozal bütünlük korunmakta, mukozal bariyer fonksiyonu, intestinal immün yanıt ve normal

flora yapısının devamlılığı sağlanmaktadır (20). PEG ile beslenme, 30 günden fazla beslenme desteğine ihtiyaç duyacak hastalara uygulanır (21).

PEG, palyatif hasta bakımında önemli bir sağlık hizmeti olup geriatri klinik pratiğine giderek daha çok yerleşmektedir (3,4). Bu yöntem, minimal invaziv olması, düşük oranda komplikasyon ve morbiditeye yol açması, uzun ömürlü ve güvenli bir beslenme yolu sağlaması gibi avantajları taşımaktadır (3-5). Sıklıkla serebrovasküler hastalık, amiyotrofik lateral skleroz, demans gibi nörolojik hastalıklar ve baş-boyun kanserleri gibi onkolojik hastalıklarda benimsenmektedir (6). İl Merkezindeki tek devlet hastanesi olmamız sebebiyle son yıllarda kliniğimize PEG uygulaması talebi ile başvuran hasta sayısının arttığını gözlemlemekteyiz. Hastanemizdeki diğer klinikler ve yoğun bakım üniteleri ile uyumlu ve ortak yaklaşım, hasta yakınlarının artan farkındalığı, bakımevlerinin PEG bakımı ve PEG'den beslenme deneyimlerinin artması PEG işlemi öncesi ve sonrası süreci kolaylaştırmaktadır.

Bu retrospektif çalışmada Ocak 2016- Haziran 2018 tarihleri arasında 65 yaş ve üstü hastalara uygulanan perkutan endoskopik gastrostomi işlemlerini ve tecrübelerimizi sunmayı amaçladık.

## GEREÇ ve YÖNTEM

## Hasta Bilgilerinin Toplanması

Giresun Üniversitesi- Sağlık Bakanlığı Profesör Doktor Atilla İlhan Eğitim ve Araştırma Hastanesi yazılım sisteminde 'perkütan endoskopik gastrostomi' işlem kodu ile Ocak 2016-Haziran 2018 tarihleri arasında 65 yaş ve üstü hastalara, genel cerrahi uzmanları tarafından uygulanan işlemlerin listesi çıkarıldı.

Her hastanın demografik bilgileri yanında, PEG endikasyonu, kayıtlara geçen PEG işlemi sonrası komplikasyonu ve 3.ay ve 12.ay sağkalım oranları kaydedildi.

### İşlem Öncesi Hazırlık

Kliniğimizde her PEG işlemi öncesi hastaların PEG endikasyonu, talep eden hekim ile konsülte edilerek konuldu. Ardından hasta ve/veya hasta yakınına bilgi verilerek işlem onamı alındı. Sonrasında hasta anestezi hekimi tarafından görülerek işlem risk değerlendirmesi yapıldı ve zamanlaması belirlendi. Hastanın kullanmakta olduğu antiagregan ve antikoagülan ilaçlar güvenli işlem için gereken optimum sürede kesildi ve/veya ilaç kullanım endikasyonuna göre düşük molekül ağırlıklı heparin kullanımına geçildi. İşlemden yaklaşık 45 dakika önce primer hastalığı için antibiyotik kullanmayan hastalara proflaksi amaçlı sefazolin sodyum 1 gr İV profilaktik olarak yapıldı.

## PEG Uygulama Tekniği

PEG tüpünün takılmasının birkaç yöntemi bulunmaktadır. Bunlar Push (Sachs-vine), Pull (Ponsky), İntroducer (Rus-sell) ve Versa (t-fastener) teknikleridir (22,23). En sık tercih edilen ve bizim de kullandığımız teknik Pull tekniğidir. Her işlem, anestezi ekibi tarafından uygulanan sedasyon/ sedoaneljezi altında yapıldı. Tarafımızca işlemin perkütan kısmında cilt insizyonu yerine sadece iğne ponksiyon alanından beslenme tüpü yerleştirildi. İşlemden 6 saat sonra, hastanemiz nutrisyon ekibi işbirliğinde PEG kateteri üzerinden beslenme başlandı.

### **BULGULAR**

Çalışmaya 63 hasta dahil edildi. Hastaların %71.4'ü kadın, %28.6'sı erkekti. Hastaların ortalama yaşı 83.1 idi (65-100). 2016 yılında 17, 2017 yılında 31 ve 2018 yılında 15 hastaya PEG uygulandı.

Hastaların PEG endikasyonu, sağkalım oranları ve komplikasyonlar Tablo 1'de özetlenmiş olup serebrovasküler olay (SVO) ve demans en sık sebepti. En sık komplikasyon peristomal kanama (% 3.1) ve peristomal sızıntı (%6.3) idi.

### Tablo 1.

| 1000011         |                        |            |
|-----------------|------------------------|------------|
| CİNSİYET        | KADIN                  | 45 (%71.4) |
|                 | ERKEK                  | 18 (28.6)  |
| PEG             | SVO                    | 30 %48.4   |
| ENDİKASYONLARI  | DEMANS                 | 15 %24.7   |
|                 | DİĞER                  | 18 %26.9   |
| KOMPLİKASYONLAR | PERİSTROMAL<br>KANAMA  | 2 (%3.1)   |
|                 | PERİSTROMAL<br>SIZINTI | 4 (6.3)    |

## **TARTIŞMA**

Türkiye İstatistik Kurumu verilerine göre ülkemizde 65 yaş üzeri nüfus 2013 yılında %7,7 iken, nüfus projeksiyonlarına göre 2023'de %10.2'e ve 2050'de %20.8'e ulaşacağı öngörülmektedir (8). Ülkemizde yaşlı nüfus artış hızı, diğer yaş gruplarına ve toplam nüfus artışına göre 3 kat daha fazladır(8).

PEG uygulama endikasyonunun literatürde coğrafi bölgelere göre değişebildiği görülmüştür. Almanya'dan yapılan bir çalışmada ortanca yaşı 63 olan 119 hastanın en sık PEG endikasyonu disfajiye yol açan tümörlerdir (9). Oysa 545 hastanın izlendiği bir Japon çalışmasında hastaların ortalama yaşı 77,2 yıl olup en sık PEG endikasyonu SVO'dur (10). Bizim çalışmamızda en sık nörolojik hastalıklar PEG endikasyonu göstermekteydi. Endikasyon alt gruplarına baktığımızda SVO birinci sırada olup bunu demans ve diğer nedenler takip etmekteydi.

PEG uygulamasına bağlı lokal komplikasyonlar literatürde %5-25 olarak bildirilmektedir (5,6). Türkiye'den Gündoğan ve arkadaşlarının yaptığı retrospektif analizde işlem sonrası erken dönemde en sık kateter yerinden kanama olup 128 hastanın %4'ünde görülmüş (15). Kore'den yapılan bir çalışmada ise 245 hastanın 27'sinde (%11) minör komplikasyon görülmüş olup 22'sinde özofagusda minör kanama, 4'ünde peristomal minimal enfeksiyon saptanmış (16). Çalışmamızda ise en sık komplikasyonlar peristomal sızıntı veya perstomal kanamadır. Hastalarımızın hiçbirinde PEG işlemine bağlı mortalite görülmedi. Komplikasyonlar çeşitli yayınlarda ileri yaş, erkek cinsiyet, hipoalbuminemi, C-reaktif protein (CRP) yüksekliği ve düşük vücut kitle indeksi ile ilişkilendirilmektedir (15-17).

PEG işlemi teknik olarak zor değildir, ancak PEG uygulaması sonrası hastanın takibi, minör veya majör komplikasyonların izlemi için multidisipliner yaklaşım gerekmektedir (17). Endoskopi ünitemizde çalışanların işlem öncesi hazırlık ve işlem sürecindeki uyumu, uygulamanın hızlı ve en az hata ile olmasını temin etmektedir. Ayrıca özellikle PEG işlemi sonrası hem kateter bakımı hem de PEG'den beslenme takibi açısından tecrübeli bakımevi calısanlarının olması bu sonuca katkıda bulunmaktadır.

Nörolojik sebepler ile PEG uygulanmış altmış beş yaş üzeri 931 hastanın katıldığı çok merkezli Japon çalışmasında, bir yıllık sağ kalım %66 idi (18). Bu çalışmada PEG'li hastaların yarıdan fazlasının 2 yıldan uzun yaşadığı gösterilmiştir (18). Kore'den yapılan bir çalışmada ise geriatrik hasta grubunda PEG uygulaması, genç yaş grubu ile karşılaştırıldığında, güvenli bulunmuş, yaşın işlem ile ilişkili komplikasyon veya mortaliteyi etkilemediği rapor edilmiştir (19).

PEG uyguladığımız hastalarımızın ortanca yaşı 83.1 idi. Çalışmamızda PEG'in, yaşlı hasta grubunda güvenli bir yöntem olduğunu ifade edebiliriz. Geriatrik hasta grubunda yaşam kalitesini arttırmak, malnütrisyonu engellemek, tekrarlayan enfeksiyonlar ile hastaneye yatış

sıklığını azaltmak için PEG, sağkalımı olumsuz etkilemeyen, kolay erişilebilir ve güvenli bir yöntemdir.

Sonuç olarak uzun dönem beslenmesi gerekli geriatrik hastalarda parenteral beslenmenin komplikasyonlarından kaçınmak için enteral beslenmenin tercih edilmesi gerekmektedir. Enteral beslenme yöntemi olan PEG'in morbidite ve mortalitesinin daha az olması, gereğinde yatak başı yapılması, genel anestezi ihtiyacı olmaması, daha ucuz ve pratik olması nedeniyle cerrahi gastrostomiye tercih edilmelidir.

#### KAYNAKLAR

- 1. http://www.un.org/en/development/desa/population/publications/pdf/ ageing/WPA2015\_Report.pdf. United Nations, Department of Economic and Social Affairs, Population Division (2015). World Population Ageing 2015 (ST/ESA/SER.A/390))
- 2. Muscedere J, Andrew MK, Bagshaw SM, et al. Screening for friality in Canada's health care system: A time for action. Can J Aging 2016;35:281-97.
- 3. Löser C, Aschl G, Hébuterne X, et al. The European Society for Clinical Nutrition and Metabolism (ESPEN) guidelines on enteral nutrition-percutaneous endoscopic gastrostomy. Clin Nutr 2005;24:848-61.
- 4. Itkin M, DeLegge MH, Fang JC, et al; Society of Interventional Radiology; American Gastroenterological Association Institute; Canadian

Interventional Radiological Association; Cardiovascular and Interventional Radiological Society of Europe. Multidisciplinary practical guidelines for gastrointestinal access for enteral nutrition and decompression

from the Society of Interventional Radiology and American Gastroenterological Association (AGA) Institute, with endorsement by Canadian

Interventional Radiological Association (CIRA) and Cardiovascular and Interventional Radiological Society of Europe (CIRSE). Gastroenterology 2011;141:742-65.

- 5. Hucl T, Spicak J. Complications of percutaneous endoscopic gastrostomy. Best Prac Res Clin Gastroent 2016;30:769-81.
- 6. Rahnemai-Azar AA, Rahnemai-Azar AA, Naghshizadian R, et al. Percutaneous endoscopic gastrostomy: Indications, technique, complications and management. World J Gastroenterol 2014;20: 739-51.
- 7. Gauderer MW, Ponsky JL, Izant RJ. Gastrostomy without laparotomy: A percutaneous endoscopic technique. J Pediatric Surg 1980;15:872-5.
- 8. www.tuik.gov.tr. Türkiye İstatistik Kurumu, Temel İstatistikleri, Nüfus ve Demografi, Nüfus Projeksiyonları.
- 9. Schieneider AS, Schettler A, Markowski A, et al. Complication and mortality rate after percutaneous endoscopic gastrostomy are low and indication-dependent. Scand J Gastroenterol 2014;49:891-8.
- 10. Kasuno C, Yamada N, Kikuchi K, et al. Current status of percutaneous endoscopic gastrostomy in general hospital in Japan: a cross-sectional study. J Rural Med 2016;11:7-10.
- 11. Chang WK, Lin KT, Tsai CL, et al. Trends regarding percutaneous endoscopic gastrostomy: A nationwide population-based study from 1997 to 2010. Medicine (Baltimore)2016;95(24):e3910.
- 12. Burney RE, Bryner BS. Safety and long-trem outcomes of percutaneous endoscopic gastrostomy in patients with head and neck cancer. Surg Endosc 2015;29:3685-9.
- 13. Türkiye Halk Sağlığı Kurumu Kanser Daire Başkanlığı, 2014 Yılı Türkiye

- Kanser İstatistikleri www.kanser.gov.tr
- 14. Loh KP, Kansagra A, Shieh MS, et al. Predictors of the use of spesific critical care therapies in patients with metastatic cancer. J Natl Compr Canc Netw 2017;15:22-30.
- 15. Gündoğan K, Yurci A, Coşkun R, et al. Outcomes of percutaneous endoscopic gastrostomy in hospitalized patients at a tertiary care center in
- Turkey. Eur J Clin Nutr 2014;68:437-40.
- 16. Lee SP, Lee KN, Lee OY, et al. Risk factors for complications of percutaneous endoscopic gastrostomy. Dig Dis Sci 2014;59:117-25.
- 17. Lee C, Im JP, Kim JW, et al; Small Intestine Research Group of the Korean Association for the Study of Intestinal Disease (KASID). Risk factors
- for complications and mortality of percutaneous endoscopic gastrostomy: a multicenter, retrospective study. Surg Endosc 2013;27:3806-15.
- 18. Suzuki Y, Tamez S, Murakami A, et al. Survival of geriatrics patients after percutaneous endoscopic gastrostomy in Japan. World J Gastroenterol 2010;16:5084-91.
- 19. Oh DJ, Kim B, Lee JK, et al. Can percutaneous endoscopic gastrostomy be carried out safely in the elderly? Geriatr Gerontol Int 2016;16:481-5.
- 20. Marik PE, Zaloga GP. Early enteral nutrition in acutely ill patients: a systematic eview. Crit Care Med 2001;29:2264-70.
- 21. Pennington CR, Powell-Tuck J, Shaffer J. Review article: artificial nutritional support for improved patient care. Aliment Pharmacol Ther 1995;9:471-81.
- 22. Cosentini EP, Sautner T, Gnant M, et al. Outcomes of surgical, percutaneous endoscopic, and percutaneous radiologic gastrostomies. Arch Surg 1998;133:1076-83.
- 23. Ponsky JL, Gauderer MW. Percutaneous endoscopic gastrostomy: indications, limitations, techniques, and results. World J Surg 1989;13:165-70.

# KONUŞMA ÖZETLERİ

Akılcı İlaç Kullanımı

Mustafa Kürşat Şahin

Ondokuz Mayıs Üniversitesi Tıp Fakültesi Aile Hekimliği Anabilim Dalı, Samsun

DSÖ'nün 1985 yılında yapmış olduğu tanıma göre akılcı ilaç kullanımı (AİK), hastaların ilaçları klinik ihtiyaçlarına uygun şekilde, kişisel gereksinimlerini karşılayacak dozlarda, yeterli zaman diliminde, kendilerine ve topluma en düşük maliyette almalarını gerektiren kurallar bütünüdür. Buna göre, "ilacın doğru endikasyonda, doğru dozda, doğru uygulama yoluyla, doğru sürede, doğru kişide/toplulukta kullanılması" genel AİK ilkeleri olarak kabul edilir. AİK ilkelerine uygun davranan hekim, ilaç seçiminde "etkililik, güvenlilik, uygunluk ve maliyet" kavramlarını göz önünde bulundurur (1,2).

Etkin bir sağlık sisteminde tüm sağlık sorunlarının % 90'ı birinci basamak sağlık kuruluşlarında çözümlenebilmektedir. Araştırmalar birinci basamak hekimlerinin diğer uzmanlara göre daha maliyet-etkin davrandığını, bununda hastalarla daha iyi iletişimden kaynaklandığını ortaya koymaktadır. Aile hekimleri hastaların ilk başvuru hekimidir. Birinci basamakta karşılaşılan hasta grubu, ikinci ve üçüncü basamağın hasta kitlesinden farklı olarak ayrışmamış hastalardan oluşmakta olup, çoğunluğu rahatsızlığı ile ilgili olarak ilk kez ilaç kullanacak hastalardır (3-6).

Diğer hekimlerle karşılaştırıldığında, aile hekiminin tedavi hizmeti sunduğu, endikasyon sayısının çok daha fazla olduğu söylenebilir. Bu endikasyonların tedavisinde kullanılabilecek/seçilebilecek binlerce ilaç alternatifi bulunmaktadır. Hekimin bu seçenekler arasında tercih yapması güçtür. Üstelik her bir ilacın çok sayıda farklı farmasötik formu ticari ismi, kullanım şekli gibi ayrıntıları bulunmaktadır. Her geçen gün piyasaya yeni çıkan ilaçlar, yeni tedavi protokolleri, mevcut ilaçlara ait bilgilerdeki değişim de göz önüne alındığında bu yük daha da artmaktadır. Bu durum, tedavi sürecinin baştan sona sistematik bir yaklaşımla yürütülmesini zorunlu kılmaktadır. Akılcı farmakoterapi olarak da adlandırılan, hekimin tedavi düzenleme aşamasındaki AİK ilkeleri tam da buna hizmet etmektedir. "AİK'e göre ilaç seçimi işlemi" sunduğu pratik yaklaşımla, ilaç seçimini kolay ve kullanışlı hale getirerek aile hekiminin tedaviyle ilgili iş yükünü azaltır. Aile hekimi, toplum yönelimli, birey merkezli yaklaşımıyla, sunduğu bütüncül, kapsamlı ve sürekli sağlık hizmeti ile bu ilkelerin uygulanmasında en özel konumdadır (1).

Enfeksiyonla mücadelede en önemli silahımız olan antibiyotiklerin, gereksiz reçete edilmesi, insanların reçetesiz antibiyotik alabilmeleri ve tıp dışı kullanılmaları direnci artırmaktadır. Akılcı olmayan ilaç kullanımında etkin ve güvenli olmayan tedavinin olabileceği, hastalığın kötüleşebileceği veya sürecin uzayabileceği, stres ve zarara yol açabileceği ve tedavi maliyetlerinin artabileceği söylenebilir (4,7-10). Dünya Sağlık Örgütü'nün (DSÖ) tahminlerine göre dünya genelinde ilaçların yarısından fazlası uygun olmayan şekilde reçetelenmekte, dağıtılmakta ya da satılmakta, yaklaşık yarısı akılcı olmayan şekilde kullanılmakta ve az sayıda hasta tedavi kılavuzlarına uygun şekilde tedavi edilmektedir. Gelişmekte olan ülkelerde, birinci basamakta kamu kurumlarında hastaların %40'ı, özel sağlık kuruluşlarında hastaların %30'u standart tedavi rehberlerine uygun tedavi almaktadır (11). İlaçların kullanımı ile ilgili tespit edilen ana sorunlara aşağıdaki durumlar örnek olarak verilebilir: (12)

- gereğinden fazla ilacın kullanılması
- gereksiz yere pahalı ilaçların kullanılması
- ilaçların hatalı şekilde kullanılması
- antibiyotiklerin ve enjeksiyon preparatlarının gereksiz yere kullanılması

- özel hasta gruplarına uygunsuz ilaç yazılması/kullanılması
- hekimlerin tedavileri konusunda hastalarını doğru ve yeterli bilgilendirmemesi
- reçete yazımında içeriğin yanı sıra doğru format bilgilerine uygun hareket edilmemesi
- temel ilaç listelerine veya güncel rehberlere uygun olmayan ilaçların reçetelenmesi
- ilaç-dışı tedavinin yeterince önemsenmemesi
- eczacıların reçete karşılama, ilaç verme ve hastayı bilgilendirme konusunda yetersiz davranış sergilemesi
- hemşire ve diğer sağlık personelinin ilaç uygulama hataları yapması
- yanlış ilaç kullanımını kolaylaştıran ilaç üretimi ve dağıtımı kaynaklı çeşitli alt yapı sorunlarının bulunması
- hastaların AOİK'e neden olan hatalı beklenti, bilgi, tutum ve davranışlarının bulunması ve bu konudaki baskılara hekim ve diğer sağlık çalışanlarının maruz kalması
- etik olmayan ilaç endüstrisi kaynaklı promosyonel aktiviteler vb.

Tedavi sürecinde ilaç seçimi, hekimin AİK'teki işlevleri arasında en kritik önemde olanıdır. Hekim farklı usullerde ilaç seçimini gerçekleştirebilse de DSÖ'nün Temel İlaçlar Eylem Planı dâhilinde yayımladığı "Reçete Yazma Rehberi"nin önerdiği K-ilaç seçim yöntemi, bu güne değin genel kabul görmüş başarılı bir yöntemdir. DSÖ'nün eğitimci ve öğrencilere yönelik hazırladığı rehberlerde de savunulduğu üzere bu işlemin Multi-Attribute Utility Analysis - MAUA ile gerçekleştirilmesi başarı şansını artırmaktadır. MAUA, ilaç seçiminde karmaşık gibi duran süreci iyi yönetme ve objektif olarak kısa sürede sonuca taşıma imkânı sunar. Bu işlemde;

- Öncelikle çözmek istenen sorunun ne olduğu somut şekilde belirlenir.
- Ardından bu sorunun neden çözülmesi gerektiği konusunda tatminkâr yanıtlara ulaşılır.
- Bu yolla sorunu çözme hedefleri belirlenmiş olur.
- Ardından bu hedefe ulaşmanın aracı belirlenmeye çalışılır. Bu aşamada hedefe taşıyacak araçlar arasından hangisinin daha başarılı olacağının belirlenmesinde, alternatifleri arasından en iyiyi bulup ortaya çıkarmak ve alternatiflerini sıraya koymak için somut bir analize başvurulur.
- MAUA analizi sayesinde alternatifler arasında hangisinin en iyi olarak seçileceği (eniyileme işlemi) kolayca kararlaştırılabilir.

MAUA yöntemi, hem hastayla karşılaşmadan önce genel olarak K-ilaçlar seçilirken, hem de hasta başında (daha süratli olmak üzere) K-ilacının o hastaya uygunluğu belirlenirken hekimler tarafından başarıyla kullanılır. Bu süreç şu şekilde akılcı bir biçimde rahatlıkla işletilebilir. Hekim önce K-tedavi ve K-ilacını bu yöntemle rahatlıkla belirler. Hasta başında ise K-ilacının bu hasta için en uygun, en etkili, en güvenli ve en maliyeti düşük ilaç olup olmadığı hususunda son kararını verir. Hasta başında K-ilacın o hastaya uygunluğuna karar verme aşamasında MAUA yöntemi ağırlıklı olarak "uygunluk" ölçütüne odaklanır.

DSÖ'nün akılcı tedavi yaklaşımı, probleme dayalı akılcı tedavi olarak bilinen ve aşağıda sıralanan çözümleyici bir süreçtir:

- 1. Hekim hastanın problemini tanımlar ve teşhis koyar.
- 2. Tedavi hedeflerini belirler.
- 3. Alternatifleri arasında etkinliği kanıtlanmış ve güvenilir tedaviyi seçer. Bu K-tedavinin (varsa K-ilacın) karşısındaki hasta için uygunluğunu değerlendirir. Nihai tedavi kararını verir.
- 4. İlaç dışı tedavilerden bahseder.
- 5. İlaç tedavisi düzenlenecek hastalara reçete yazar.
- 6. Hastayı ilaçları ve tedavisi konusunda açık ve anlaşılır bir şekilde bilgilendirir.
- 7. Tedavi başarısını değerlendirmek adına hastayı takip eder.

MAUA, ilaç seçiminde hekime büyük kolaylıklar sağlar ve isabetle K-ilaç seçmesine yardımcı olur. Dolayısıyla MAUA'yı AİK ilkelerine uygun reçete yazmak için her hekimin bilmesi gerekir. MAUA yöntemiyle seçilecek ilacın kullanılacağı endikasyon ne olursa olsun,

AİK ilkelerine göre ilaç seçiminde standart 4 ölçüt kullanılır. Bu ilaç seçim ölçütleri: etkililik, güvenlilik, uygunluk ve maliyettir. İsabetli bir ilaç seçiminde bulunabilmek için bu ölçütlerin neleri kapsadığının bilinmesi gerekir.

Etkililik: İlacın kullanılma gerekçesini karşılayan ölçüttür. Yani, tedavi objektifine ne ölçüde yardımcı olduğu dikkate alınarak etkililik değer ölçütü belirlenir. Bu ölçütte ilacın farmakodinamik ve farmakokinetik özellikleri belirleyicidir.

Güvenlilik: İlaç yan etki /karşıt etki görülme sıklığı, bu sorunların ciddiyet arz etmesi, risk/yarar ilişkisindeki risk oranının boyutu bu ölçütü belirler.

Uygunluk: İlacın ilgili hasta için uygun olup olmadığını çok çeşitli unsurlar belirleyebilir. İlacın kullanım avantaj/dezavantajına sahip olup olmaması gibi konular dikkate alınarak değerlendirme yapılır. Örneğin kontrendikasyonlar, kullanım kolaylığı, kullanım sıklığının az veya çok olması, o bölgede/ülkede o ilaca ulaşımın kolay olup olmaması, ilaç-ilaç etkileşimi, ilaç-besin etkileşimi, özel hasta gruplarında kullanım kolaylığı/zorluğu bulunup bulunmaması, enteral/parenteral kullanımlar vb. unsurlar ilacın uygunluğunu belirlemede kullanılan ayrıntılı ölçütlerdir.

Maliyet: İlacın seçimi sırasında maliyet ölçütü ilaç adaylarının tedaviyi sağlamada ortaya koydukları toplam maliyet üzerinden hesaplanır. Maliyet ölçütü değerlendirilirken, ülke imkânları, geri ödeme sistemi, akut ya da kronik hastalıkta ilaç kullanımı, toplam tedavi maliyeti, günlük, haftalık, aylık, yıllık maliyet, kutu maliyeti ya da reçete maliyeti gibi ölçütler dikkate alınabilir. Gerektiğinde maliyet hesaplamaları daha da genişletilebilir. Akut ve kronik hastalıklar için genellikle ayrı maliyet hesaplamasına gidilmelidir. Akut hastalıkların tedavisi tek bir reçeteye yazılacak ilaçlarla tamamlanacaksa, bu gibi hastalıkların tedavisinde reçeteye yazılması düşünülen ilgili ilacın maliyetinin ne kadar olacağı üzerinden işlem yapılır. Bu yöntem, kronik hastalıklarda yanıltıcı olabilir. Bu durumda reçetede yazılması öngörülen maliyet yerine günlük, haftalık, aylık, yıllık maliyet gibi standardize edilmiş maliyet hesapları daha uygundur. Aylık maliyet hesabı, kronik hastalıklarda (pek çok ilacın standart tedavi rejimlerinde kullanımına uygun olarak 1 aylık yetecek miktarda ilacı içermesinden dolayı) maliyet hesaplama kolaylığı açısından tercih edilen bir uygulama şeklidir.

Hasta için seçenekler içinden etkililiği kanıtlanmış, güvenilir ve o hastaya en uygun olan tedavi seçilmelidir. Ampirik kullanım söz konusu ise, antibiyotik direncinin hangi antibiyotiklerin kullanımını kısıtladığı, kombine antibiyotik tedavisinin gerekli olup olmadığı, tedaviyi etkileyebilecek konağa ilişkin faktörler göz önüne alınmalıdır. Hekim hastanın sağlık problemini dikkatlice tanımladıktan sonra hastaya tanı ve uygulanacak tedavi konusunda anlayabileceği şekilde bilgi vermeli, tedaviye uyumu artıran en önemli unsur olan "hastanın tedaviye katılımını" sağlamalıdır (1).

Sonuç olarak akılcı ilaç kullanımı ilacın üretiminden imhasına kadar geçen sürede olan her şeyi içermektedir. Hekimlere önemli görevler düşmekle birlikte bu sürecin doğru yönetilebilmesi tüm paydaşların akılcı ilaç kullanımı için gayret göstermesine bağlıdır

#### Kaynaklar

- 1. Akıcı A, Uzuner A. Birinci Basamak Sağlık Kurumlarında Çalışan Hekimlere Yönelik Akılcı İlaç Kullanımı. (Ed. Akıcı A). T.C. Sosyal Güvenlik Kurumu Başkanlığı 2013, Ankara, SGK Yayın No:112. Erişim adresi: http://gss.sgk.gov.tr/aik/smm/hekim/doc/hekim\_aik\_kitap.pdf
- **2.** Yarış F, Dikici MF. Birinci Basamakta Akılcı İlaç Kullanımı Köşesi, kişisel ilaç listesi oluşturma. Aile Hekimliği Aktüel Bilimsel Tıp Dergisi 2007; 1 (3), 46-49.
- **3.** Yarış F, Dikici MF. Hastaların tedaviye uyumu ve iletişim. Aile Hekimliği Dergisi 2012; 2(3): 40-43.
- **4.** Yarış F, Dikici MF. Aile Hekimliğinde Antibiyotik Kullanımı Nereye Kadar? ANKEM Derg 2007;21(Ek 2):229-31.
- 5. Yarış F. Birinci basamak hekimliğinde akılcı ilaç kullanımı. Aktüel Tıp Dergisi, Aile Hekimliği Özel Sayısı 2004 Mayıs; 9 (6): 59-63.

- **6.** Kadıoğlu M, Yarış F, Yarış E, Kalyoncu Nİ. Birinci basamakta sık görülen enfeksiyonlarda akılcı farmakolojik yaklaşım. Sürekli Tıp Eğitimi Dergisi 2003; 12 (1): 23-25.
- 7. Tekeli E, Çevik MA. Antibiyotik kullanımının genel prensipleri. Leblebicioğlu H, Usluer G, Ulusoy S, editör. Antibiyotikler. Ankara; 2008. p. 107-26.
- 8. Pillai SK, Eliopoulus GM, Moellering RC. Principles of antiinfective therapy. Mandell GL, Bennett, Dolin R, ed. Principles and practice of Infectious Diseaeses. Philadelphia;2010.p. 264-78.
- 9. Kahveci R, Gümüştakım RŞ. Solunum Yolu Enfeksiyonlarında Akılcı Antibiyotik Kullanımı. Turkiye Klinikleri J Fam Med-Special Topics 2011;2(4):64-8.
- 10. E. Parlak, Y. Çayır, A. Ertürk. Aile Hekimlerinin Akılcı Antibiyotik Kullanımı Açısından Durumları: Erzurum'dan Kesitsel Bir Çalışma.Euras J Fam Med 2013; 2(1): 27-32
- 11. Akıcı A . Akılcı Tedavi Sürecinde Hekimlere Yol Gösterecek Pratik Yaklaşımlar. Turkish Family Physician 2013; 4(2): 1-7
- 12. World Health Organization (WHO). Problems of irrational drug use. http://archives.who.int/prduc2004/rducd/session\_guides/problems\_of\_irrational\_drug\_use.h tm

## Periyodik Sağlık Muayenesi

## Mustafa Fevzi Dikici

Ondokuz Mayıs Üniversitesi Tıp Fakültesi Aile Hekimliği Anabilim Dalı, Samsun

Organizmanın giderek yaşlanan ve yıpranan yapısı bireylerde bu süreci hem uzatma hem de olabildiğince sağlam ve sorunsuz olarak sürdürebilme çabasına yol açmaktadır. Bu içgüdü mümkün olduğunca sağlıklı ve uzun yaşamak için bireylerin ellerinde yiyecek, içecek, ilaç gibi en kolay ulaşılabilir seçeneklerden başlayarak doğada bulunan değişik mineraller, manipülasyonlar ve spritüel uygulamalar gibi geniş bir yelpazede arayışa neden olabilmektedir (1).

Günümüzde giderek daha fazla kişi sağlıklı yaşam biçimlerine ve periyodik sağlık kontrollerini yaptırmaya ilgi duymaktadır (2).

Aile hekimliği, sağlık sistemiyle ilk tıbbi temas noktasını oluşturur; hizmet almak isteyenlere açık ve sınırsız bir giriş sağlar; yaş, cinsiyet ya da kişinin başka herhangi bir özelliğine bakmaksızın tüm sağlık sorunlarıyla ilgilenir. Sağlığı geliştirici, hastalıklardan koruyucu, iyileştirici, esenlendirici ve destekleyici bakımı sunan aile hekimleri bu istemi karşılamak için çok uygundur. Periyodik sağlık muayenesi (PSM) sağlığı geliştirme ve hastalıkları önleme bağlamında birincil bakım uygulamalarının önemli bir bileşenidir (3).

PSM sağlıklı veya henüz bir hastalık belirtisi olmayan bireylerde; sağlık durumunun korunabilmesi ya da geliştirilebilmesi amacıyla bireye özgü, düzenli yapılan sağlık kontrolleridir. PSM; bireye ve içinde bulunduğu toplumun risk faktörlerine göre biçimlendirilmiş, kapsamlı bir anamnez ve muayeneyi içeren, tıbbi kanıtlara dayalı yapılandırılmış tarama testleri olan, aynı zamanda danışmanlık, sağlık eğitimi, immünizasyon ve kemoprofilaksi uygulamalarını da içeren bir izlem programıdır (4).

Hastalık belirtisi olmayan kişilerin periyodik olarak sağlık kontrolünden geçirilmesi fikri ilk kez 1861'de tüberküloz ve göğüs hastalıkları uzmanı olan Dr. Horace Dobell tarafından dillendirilmiştir. Dr. Dobell ayrıntılı bir öykü, çok titiz bir fizik muayene ve laboratuvar testleri kullanarak fizyolojik durumdaki bir bozukluğu en erken evrede tanımlamanın hastalara tedavi ve

tam iyileşme için bir şans verebileceğinden hastalıkları en erken evrede tanımlamanın bir yolu olarak periyodik sağlık muayenesini önermiştir. Dr. George Gould gibi bazı doktorlar Dobell'i desteklemişlerdir. Dr. Gould gelecekte ortaya çıkabilecek hastalıkları önleyebilecek ve yaşam kalitesini artırabilecek önemli bir enstrüman olarak hastaların periyodik olarak muayenelerini önermiştir (5-7).

Okul çocuklarının periyodik muayenesi 1800'lerin sonunda ve 1900'lerin başında fiziksel yetersizlikleri ve bulaşıcı hastalıkları saptamanın bir yolu olarak savunulmuştur. Henüz kanser hakkında çok az şey bilinirken, 1918 yılında çoğu seçkin hekim erken tanının kür olasılığını artırabileceği umudu ile özellikle kanserin erken tanısı için yıllık muayeneler yapılmasını savunmuşlardır. Yaşam sigortası şirketleri yirminci yüzyılın başında sigorta yapacakları hastaları muayene etmeleri için bazı hekimleri görevlendirmiştir. Sigorta yöneticileri ölüm risklerini azaltmak amacı ile müşterilerinin en az bir kez muayene olmalarını önermeye başlamışlardır. Bu uygulamalar periyodik sağlık muayenesinin yararına ilişkin küçük kanıtların yayınlanmasını sağlamıştır. İlk önemli destek "Yaşam Uzatma Enstitüsü (Life Extension Institute)'nün" tıbbi direktörü Eugene Lyman Fisk'ten gelmiştir. Fisk muayene edilen kişilerin gözlenen mortalitesi ile sigorta istatistiklerine göre hesaplanan beklenen mortalitelerini karşılaştırmış ve mortalite azalmasını göstermiştir (8).

Fizik muayene yapmadaki bu merkezi rol hasta — hekim ilişkisi kurmak için bir firsat olarak PSM'nin kabul edilmesi için tıbbi kurumlar tarafından da teşvik edilmektedir. Dr. Francis W. Peabody 1925'te bu ilişkiyi şöyle vurgulamıştır: "Klinisyenin temel niteliklerinden biri insanlıkla ilgilenmektir, hastanın bakımının sırrı hastaya (kişiye) özel bakım vermektedir." (9). Amerikan Tıp Derneği (AMA) da 1922'de resmi olarak periyodik sağlık muayenesini desteklemiş ve yaygınlaşması için kampanya başlatmıştır (10).

1925 yılında da 35 yaş üzeri kişilerin yıllık muayenesini öneren bir belge yayınlamıştır. Yetmişli yılların başlangıcına kadar bu uygulama devam etmiştir. Standart klinik uygulama olarak popülaritesi giderek artan yıllık fizik muayeneler, 1960'larda kanıta dayalı tıbbın ortaya çıkması ile tıbbi kuruluşlar tarafından değerine dair ciddi olarak sorgulanmaya başlanmıştır. Bazı hastalıkların bu muayeneler sırasında henüz tanısal büyüklüğe ya da olgunluğa ulaşmadığı için kolaylıkla gözden kaçabilmekte olduğu, ayrıca bu hastalıklar tanısal büyüklüğe ya da olgunluğa ulaştığında ise zaten semptom verdiği için ek tarama ya da tetkik yapılmasına gerek kalmadığı gözlemlenmiştir (6).

Bin dokuz yüz yetmişlerde, sağlık bakımı sunanlar bireyselleştirilmiş PSM'ne kaymaya başlamışlardır. Yıllık muayeneler kapsamlı öykü, fizik muayene, danışmanlık ve hastanın temel sağlık durumunu belirlemek için kullanılan tanısal testlerin yapıldığı fizik değerlendirmeler olarak yapılırken PSM bireylerin risk profillerine göre biçimlendirilmiş koruyucu hizmetler olarak ortaya çıkmaya başlamıştır. Periyodik sağlık değerlendirmeleri fark edilebilir ve tedavi edilebilir durumlar için hastanın yaşı, cinsiyeti ve risk profili değerlendirildikten sonra gerekli koruyucu sağlık hizmetlerini sunma olarak tanımlanmıştır (7).

PSM'nin bu şekilde yeniden tanımlanması koruyucu hizmetlerin geçerliliğini değerlendiren önemli çalışmaların başlatılmasını teşvik etmiş ve PSM'nin geçerliliğini değerlendirmek için pek çok çalışma yürütülmüştür. PS Frame ve SJ Carlson 1975'de tarama testlerinin doğruluğunu ve 36 majör tıbbi durumla ilişkili değişen hastalık seyri ve mortalite üzerine etkilerini araştırmışlar ve periyodik muayenelerin yaşa ve cinsiyete özgü, etkinliği kanıtlanmış testlere odaklanması gerektiğini belirtmişlerdir (11-13).

Kanada Koruyucu Sağlık Hizmetleri Görev Gücü (CTFPHC) (ilk kuruluş adı Kanada Periyodik Sağlık Muayenesi Görev Gücü) 1976'da kurulmuştur. Yetmiş sekiz farklı klinik durumu ve hizmeti gözden geçiren CTFPHC tanımlanmamış "yıllık kontrollerin" terk edilmesi gerektiğini ve yerini başka amaçlar için tibbi ziyaret seyri sırasında yürütülen yaşa özgü sağlığı koruma paketleri serisinin alması gerektiğini belirten ilk raporunu 1979'da yayınlamıştır (14).

ABD Koruyucu Hizmetler Görev Gücü (USPSTF), ilk kez ABD Halk Sağlığı Hizmetleri tarafından 1984'te toplanmış; 1998'de sponsorluğu Sağlık Bakım Araştırmaları ve Kalite Kuruluşu (AHRQ) üstlenmiştir. USPSTF koruyucu hizmetler ve birincil bakımda özel sektör uzmanlarının bağımsız panelidir. USPSTF tarama, danışmanlık ve koruyucu hizmetlerin bilimsel kanıtlarının titiz ve tarafsız bir biçimde değerlendirmesini yapmaktadır. Onun önerileri uluslararası alanda klinik koruyucu hizmetler için altın standart olarak kabul görür (15).

USPSTF ilk önerilerini 1989'da Klinik Önleyici Hizmetler Rehberi adı altında yayınlamıştır. Devamına her yıl güncellenerek süregelmektedir. Bu rehberlerdeki öneriler hastalıkları önleme ve sağlığı geliştirme girişimlerinin dayandığı temeli oluşturur. USPSTF önerilerini belli kriterler temelinde yapar. Her koruyucu hizmetin yarar ve zararları konusunda ki kanıtları gözden geçirir, her koruyucu hizmetin net yararı konusunda uzlaşmaya varır ve önerilerini yapar. Bu önerileri kanıt gücüne göre derecelendirir (15). Türkiye'nin aile hekimliği uygulamasına önerilen periyodik muayeneler ve tarama testleri rehberi ise 2014 yılı hazırlıkları sonrası 2015'te tüm sahanın kullanımına sunulmuştur.

### Kaynaklar

- 1. Mazıcıoğlu MM, Şafak ED, Üstünbaş HB. Periyodik Sağlık Muayenesinin Tarihi Gelişim Süreci. Turkiye Klinikleri J Fam Med-Special Topics 2013;4(5):1-4
- 2. Oboler SK, Prochazka AV, Gonzales R, Xu S, Anderson RJ. Public expectations and attitudes for annual physical examinations and testing. Ann Intern Med. 2002;136:652-659.
- 3. EURACT. The European Definition of General Practice/Family Medicine. Short Version. Leuven: European Academy of Teachers in General Practice, EURACT; 2005. p. 6.
- 4. Grimm KJ, Diebold MM. The periodic health examination. In: Rakel RE, ed. Textbook of Family Practice 7th ed. WB Saunders Company. Philadelphia 2007; p.139-58.
- 5. Dobell H. Lectures on the Germs and Vestiges of Disease, and on the Prevention of the Invasion and Fatality of Disease by Periodical Examinations. London: Churchill; 1861:142–163. http://books.google.com.tr.
- 6. Han PK. Historical changes in the objectives of the periodic health examination. Ann Intern Med. 1997;127:910-917.
- 7. Akdeniz M, Asik Z, Yaman H. Periyodik Sağlık Muayenesi. GeroFam. 2010;1(1):69-83.
- 8. Fisk, 1921. Fisk B: Physical examinations: A national need. The Nation's Health 1921; 3:286-289.
- 9. Boulware LE, Marinopoulos S, Phillips KA, Hwang CW, Maynor K, Merenstein D, Wilson RF, Barnes GJ, Bass EB, Powe NR, Daumit GL. Systematic review: the value of the periodic health evaluation. Ann Intern Med. 2007 Feb 20;146(4):289-300.
- 10. Dodson JM. The American Medical Association And Periodic Health Examination. Am J Public Health (N Y). 1925 Jul;15(7):599-601.
- 11. Frame PS, Carlson SJ: A critical review of periodic health screening using specific screening criteria. Part I: Selected diseases of respiratory, cardiovascular, and central nervous systems. J Fam Pract 1975; 2:29-36.
- 12. Frame PS, Carlson SJ: A critical review of periodic health screening using specific screening criteria. Part 2: Selected endocrine, metabolic, and gastrointestinal diseases. J Fam Pract 1975; 2:123-129.
- 13. Frame PS, Carlson SJ: A critical review of periodic health screening using specific screening criteria. Part 3: Selected diseases of the genitourinary system. J Fam Pract 1975; 2:189-194.
- 14. Canadian Task Force on Preventive Health Care. http://canadiantaskforce.ca/.
- 15. About the USPSTF. U.S. Preventive Services Task Force. http://www.uspreventiveservicestaskforce.org/about.htm.

## Süt Çocuklarında Tamamlayıcı Beslenme

## Dr. Öğr Üyesi Elif ATEŞ

## Karadeniz Teknik Üniversitesi Tıp Fakültesi Aile Hekimliği Anabilim Dalı, Trabzon

Uygun fiziksel büyüme ve bilişsel gelişim sağlıklı ve yeterli beslenmeye bağlıdır. Obezite, malnütrisyon, yeme bozuklukları günümüzde, hekimlerin özellikle de koruyucu sağlık hizmetlerinin sunulduğu birinci basamakta çalışan hekimlerin en önemli sorunlarından biridir. Bireylerin sağlık durumunun geliştirilmesi ilkesi çerçevesinde, popülasyonunda yer alan bireylere danışmanlık vermek aile hekimlerinin sorumlulukları arasındadır. Problemlerin düzeltilmesinden öte, ortaya çıkması engellenmelidir. Yeme bozukluklarını düzeltmek yerine, çocukluktan, hatta bebeklikten itibaren yeme davranışlarının sağlıklı geliştirilmesi önem arz etmektedir. "Ağaç yaş iken eğilir" atasözü tam da bu durum için kullanılabilir. Bugün bu oturumda uygun tamamlayıcı beslenmeyi, iyi tamamlayıcı beslenme gıda özelliklerini ve duyarlı beslenme ilkelerini konuşacağız.

Anne sütünün önemi tartışılmaz. Doğumu takip eden ilk saatte başlanıp, ilk 6 ay sadece anne sütünün alımının sağlanması gerekmektedir. Bireyin sağlıklı büyümesi için tüm enerji ve besin öğelerini ve Anti-enfektif faktörleri içermesi dolayısıyla anne sütüne en az 2 yıl devam edilmesi önerilmektedir. Her ne kadar bazı çalışmalar 4. ayda başlanmasının besin alerjisi, anemi ve çölyak hastalığına karşı koruyucu olduğunu belirtmişlerse de; kanıt düzeyleri klinik kararı etkileyecek boyutta değildir. Bu çalışmalar ile ilgili değişik soru işaretleri mevcuttur. Gebelerin ve emziren annelerin beslenmelerinin desteklenmesi süt çocuklarını anemiden korumada daha etkin uygulamadır.

Tamamlayıcı gıdaların besin kalitesi genellikle anne sütüne göre daha azdır. Yetersiz verilmesi, çok erken veya çok geç verilmesi ile anne sütünün yerini alabilir. Bebeğin mide kapasitesi gıdaların alım miktarını kısıtlar. Tekrarlayan enfeksiyonlar iştahı azaltabilir. Bebeğin bakımından sorumlu kişi sadece uygun gıdayı seçmek ve sağlamak değil, aynı zamanda bebeğin yemesine yardım etmek ve onu cesaretlendirmek durumundadır.

Uygun tamamlayıcı beslenme özelliklerini dört başlık altında toplayabiliriz. Uygun gıda zamanında, yeterli, güvenli ve uygun olmalı. Şimdi her bir maddeyi tek tek ele alalım. Zamanında olmalıdır; yani 6 aydan sonra tüm bebekler gıda almaya başlamalıdırlar. Altıncı ayda sindirim sistemi yağ, protein ve nişastanın etkin sindirimi ve emilimi için yeterli derecede olgunlaşmıştır. Dördüncü ay civarında böbrek işlevleri oldukça olgun hale gelmiş olup, yüksek "solüt" yükü ile baş etme ve yoğunlaştırma yeteneği gelişmiştir.

Yeterli olmalıdır; yani anne sütü ile beslenme devam ederken, bebeğin büyüme ihtiyaçlarını karşılayacak şekilde, enerji, protein ve mikrobesinler açısından yeterli olmalıdır. Tamamlayıcı besin miktarı, sıklığı, sürekliliği ve çeşitliliği yeterli olmalıdır.

Güvenli bir yolla verilmelidir; yani patojen kontaminasyonundan uzak, hijyenik formda hazırlanmalı, saklanmalı ve verilmelidir.

Uygun bir şekilde verilmelidir; yani çocuğun açlık ve tokluk sinyalleri ile uyumlu gıdalar verilmelidir. Çocuğun parmaklarını veya kaşık kullanarak, yeme eylemine aktif katılımını teşvik ederek, yemek sıklığı ve yemek metodu yaşına uygun olmalıdır.

| Yaş          | Ek kalori<br>zereksinimi | Besin özellikleri                             | Sıklık                                | Bir öğün miktarı                                     |
|--------------|--------------------------|---|---------------------------------------|--|
| 6-8<br>1y    | 200 kcal/gün             | Yoğun püre<br>halinde                         | 2-3 / gün<br>1-2 defa<br>atıştırmalık | 2-3 tatlı kaşığı<br>veya<br>250 mL kasenin<br>varısı |
| 9-<br>11 ay  | 300 kcal/gün             | İnce kesilmiş,<br>ezilmiş                     | 3-4 / gün<br>1-2 defa<br>atıştırmalık | 250 mL kasenin<br>varısı                             |
| 12-<br>23 ay | 550 kcal/gün             | Aile yemekleri ile<br>aynı,<br>Parçalanabilir | 3-4 / gün<br>1-2 defa<br>atıştırmalık | 250 mL kasenin<br>¾'ü                                |

Gıda çeşitliliği olmalı ve yeterli kalitede et, tavuk, balık veya yumurta, A vitamininden zengin meyveler ve sebzeler tüketilmelidir. Bunların alımı mümkün değil ise takviye edilmiş gıdalar ve vitamin, mineral takviyeleri önerilebilir. Çorbalar ve sebze-et yemekleri ezilerek püre kıvamında verilebilir. Gıdanın bir miktar pürtüklü kalması bebeğin tam katı gıdalara geçmesini kolaylaştıracaktır. Aksi halde tamamen pürtüksüz hale getirilmiş (karıştırıcılar yardımı ile) gıdalar bu süreci zorlaştıracaktır. Çorbalara eklenecek nohut, bulgur, pirinç, bezelye, kuru fasulye, mercimek ve patates çorbaları enerji ve besin öğesi yönünden zenginleştirir. Yarım tatlı kaşığı zeytinyağı, bitkisel kaynaklı sıvı yağlar veya tereyağı eklenebilir. Hem enerjiyi arttırır hem de yemeği kolay yenebilir kıvama getirir. Şeker, reçel ve bal enerji dışında besin öğesi içermez. Ülkemizde yaygın olarak kullanılan pekmez, hem besin öğesi hem de enerji yönünden zengindir.

Tamamlayıcı beslenmede besinler kadar besleme davranışları da önemlidir. Bebekler ve erken yaş dönemi çocuklar beslenme konusunda yardıma ihtiyaç duyarlar. "Duyarlı Beslenme" olarak adlandırılan bu yaklaşımda bebek aktif bir şekilde beslenme eylemine katılır. Beslenme desteği yavaş, sabırlı olmalı, asla zorlanmamalıdır.

Bebek ailenin kültürel yapısına uygun saat ve mekanda, aile ile birlikte yemelidir. Oturmaya başladığı 6 aydan itibaren, mümkünse mama sandalyesinde, sofra düzenine katılmalıdır.

Bireyin gelecekte tüm yaşantısını etkileyebilecek beslenme konusunda, "Duyarlı Beslenmenin" nasıl yapılabileceği konusunda sağlık hizmeti sunucuları kişileri bilgilendirmelidir. Bebek bakımından sorumlu çoğu kişi duyarlı beslenmenin önemini veya nasıl yapacaklarını bilememektedir. Annelerin, bakıcıların hem bilgi hem de becerileri geliştirilmelidir.

Bebeğin kilo takibi bir çocuğun yeterince beslenip beslenmediğinin ve sağlıklı olduğunun göstergesidir. Eğer ebeveynlerin "bebeğim doymuyor", "ağlıyor, beslenmesi yetersiz galiba" gibi endişeleri mevcut ise; kilo takibi bu endişelerin cevabını ortaya çıkarabilir. Annelerin neden tamamlayıcı beslenmeye erken veya geç başladıklarının sorgulanması gerekmekte ve bu hususta danışmanlık verilmelidir. Örneğin çoğu "anne sütü yetmediği" gerekçesi ile erken

tamamlayıcı gıdaya başlayabilir. Hekimlerin veya sağlık çalışanlarının anneleri dinlemek, endişelerini ortaya çıkarabilecek içtenlikle sorular sormak ve onların bebeklerini beslemeleri konusunda ilgileri olduğunu hissettirmeleri, anneler ile iletişimi güçlendirecektir. Dertlerini aktarabilen anne hekimin önerilerine daha dikkatli uyacaktır.

Anlattıklarımızı günlük pratiğimizde hastalara aktarırken somut bir şeyler söylemek adına birkaç örnekle bahsedeceğim. Tamamlayıcı beslenmeye 6. ayda ilk öğün olarak meyve ile başlanabilir. Mevsim meyvesi şeftali veya armut gibi, ne ise, cam rendede püre kıvamında hazırlanır. Posası ile beraber verilir. İlkeler; 1/4 ile (veya 2-3 kaşık) başla, ertesi gün yarısı (yani bir önceki günün 2 katı), sonra bütün olabilir. 100-150 cc ye kadar her gün miktarı 2 katına çıkarılarak başlanır. Öğleden sonraki (ikindi) öğün olarak verilebilir, mutlaka üstüne anne sütü verilmelidir. Her defasında yeni bir besin denenmeli, çocuğun bu besine toleransı gözlenmeli ve 5-7 gün aralıklarla yeni bir besin grubu eklenmelidir.

Ikinci hafta sabah 10.00 öğünü gibi yogurt eklenebilir. 2-3 kaşık başla x 2-----150 cc ile devam edilebilir. İlkeler hep aynı.

Üçüncü hafta üçüncü öğün sebze püresi başlanabilir. Öğle öğünü (12.00-13.00) olabilir, üstüne emzirilmelidir. Pratik örnek:1 kabak+ 1 patates+ 1 havuç az suyla haşlayın, piştikten sonra 1 tatlı kaşığı zeytinyağı ekleyin. Tuz ve salça kullanılmamalıdır. Tuz eklenmesi bebekte nefrolitiazise neden olabilir. Kimyon, kekik, nane, maydanoz, dereotu kuru veya taze kullanılabilir. İlk gün 2 kaşık, 2. gün 3 kaşık, sonra her gün 1,2 kaşık arttırarak 10-12 kaşık (100-150 cc) (1 küçük kase) olana kadar doz arttırılır. Bebeğin gaita kıvamına göre sulandırılabilir (Boza kıvamında başla), çatalla ezilir.

1. aydan sonra 4. hafta kahvaltı öğününe başlanır. 1 kibrit kutusu (30 gr) beyaz peynir (suda bekletilmiş), tuzsuz, yağlı olabilir. 1 dilim çavdarlı ekmek içi ve1-2 tatlı kaşığı pekmez ile bunları sulandırmak için anne sütü veya bitki çayları (ıhlamur, papatya) veya evde hazırlanmış meyve suyu kullanılabilir. Dördüncü, beşinci günde haşlanmış yumurta sarısı eklenebilir, önce 1/4, 2 gün sonra yarım, 2 gün sonra 3/4, 2 gün sonra tama çıkılır. 10 gün sonra içine 1 ceviz veya 3, 4 badem rendelenebilir.

Genel olarak yapılması gereken yaklaşımlardan bahsedip sunumumu tamamlayacağım. Yemek sırasında çocuğun mutlaka oturur pozisyonda olması gerekir. Yemek yeme eylemine edilgen değil, etken olarak katılımının sağlanması için çay tabağı ile önüne bir miktar koyup kendi alması sağlanabilir. Parmak yalamasına, elini ağzına götürmesine izin verilmelidir. Ek gıdaları mutfakta veya yemek yemek için ayrılan bölmede yemelidir.

Konuştuğumuz bu ilkeler ve yaklaşımlar doğrultusunda bireylere vereceğimiz danışmanlık, bebeğin yeme bozuklukları ile karşılaşmamamızda bize yardımcı olacaktır. Referanslar

- ATEŞ, E., SET, T. (2017). Süt Çocuğunda Tamamlayıcı Beslenme. Turkiye Klinikleri Journal of Family Medicine Special Topics, 8(5), 319-323.
- Organization WH. Complementary feeding: report of the global consultation, and summary of guiding principles for complementary feeding of the breastfed child. 2003.
- OMS. Complementary Feeding: Family Foods for Breasfed Children: OMS (Organizacion Mundial de la Salud); 2000.
- Bakanlığı TS. Tamamlayıcı Beslenme Sağlık Çalışanları için Rehber Kitap. Ankara; 2009.
- Devecioğlu E, Gökçay G. Tamamlayıcı Beslenme. Çocuk Dergisi. 2012;12(4):159-63.
- Dewey K. Guiding principles for complementary feeding of the breastfed child. 2003.

### AİLE HEKİMLİĞİNDE PRATİK EKG

## Prof. Dr. Turan SET

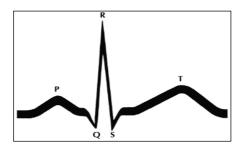
Karadeniz Teknik Üniversitesi Tıp Fakültesi Aile Hekimliği Anabilim Dalı, Trabzon

## I. Genel Bilgiler

### 1) Kalbin elektriksel aktivitesi ve EKG

Kalp kasının kasılmasıyla birlikte oluşan elektriksel değişim "depolarizasyon" olarak adlandırılır ve bu değişim vücut yüzeyine yerleştirilen elektrotlarla kaydedilir. Kas kitlesinin elektriksel değişikliklerle önemli bir ilişkisi vardır. Yani, kas kitlesi çok olursa, kasılmaya eşlik eden elektriksel değişiklikler de o oranda büyük olur.

Atriumların kasılmasıyla P dalgası, ventriküllerin kasılmasıyla QRS kompleksi ve ventriküllerin repolarizasyonu ile T dalgası oluşur (Şekil 1).



Şekil 1. Elektrokardiyografide dalgalar

EKG'de depolarizasyon dalgası yerleştirilen elektroda doğru hareket ediyorsa, bu dalga EKG kağıdına pozitif bir dalga olarak kaydedilir. Eğer, dalga elektroda ters yönde hareket ediyorsa negatif bir dalga olarak kaydedilir.

### 2) EKG kağıdının kalibrasyonu

Kalibrasyon kesinlikle unutulmamalı ve her kayıttan önce mutlaka yapılmalıdır. Normal şartlar altındaki EKG kayıtları 10 mm'lik vertikal bir defleksiyon, 1 mV'luk bir potansiyeli temsil edecek sekilde ayarlanmıstır.

Kalibrasyonun dalgaların boylarının değerlendirilmesi yönünden önemi vardır. Uygun bir kalibrasyondan sonra V6'da uzun bir R dalgası sol ventrikül hipertrofisini, uzun bir P dalgası atrium hipertrofisini ve uzun bir T dalgası da hiperkalemiyi gösterebilir.

### 3) Kalp hızının hesaplanması

EKG'de kalp hızının doğru olarak hesaplanması için siklus uzunluğunun ölçülmesi gereklidir. Bu mesafe birbirini takip eden  $2\ R$  dalgası tepesi arası ölçülerek hesaplanır. Her bir küçük kare 0,04 saniye olduğuna göre, beş küçük kareden oluşan her bir büyük karenin 0,2 saniye olduğu görülür (0,04sn x 5=0,2 sn). Bir saniyede ise beş büyük kare makineden geçmektedir (0,2sn x 5=1 sn). Dolayısıyla 1 dakikada 300 büyük kare makineden geçer (60sn x 5=300). Buna göre 300'ün iki R dalgası arasındaki büyük kare sayısına bölünmesi ile kalp hızı bulunur. Örneğin  $2\ R$  dalgası arasında 3 büyük kare varsa, kalp hızı 300/3=100'dür.

### 4) O-T mesafesi

EKG'deki diğer bir faydalı ölçüm Q-T mesafesinin ölçülmesidir. Bu, QRS kompleksinin başından T dalgasının bitimine kadar olan mesafedir. Q-T süresi ventriküler sistolün tamamına tekabül eder ve birçok patolojik durumda anormal şekilde uzar. Normalde Q-T mesafesi iki R

dalgası arasındaki uzunluğa bağlıdır. Ölçülen bir Q-T mesafesinin o esnadaki kalp hızına göre normal olup olmadığını belirlemek için  $QTc = QT / \sqrt{RR(sn)}$  formülü ile Düzeltilmiş QT hesaplanır. Buna göre 70'in üzerindeki her 10 atım için 0,02 saniye fazlası, altındaki her 10 atım için ise 0,02 saniye eksiği bize pratik olarak düzeltilmiş QT mesafesini verir.

## 5) Artefaktlar

Hasta kendisini rahat bırakmazsa göğüs kaslarının aktivitesine bağlı artefaktlar sık olur. Hastanın iskelet kaslarının kaydı etkilememesi bakımından tam bir dinlenme halinde bulundurulması gerekir. EKG'nin çekilmesi ve hazırlanmasında ortaya çıkan makinedeki arızalar ve özellikle hastanın üzerindeki metal yapıdaki yabancı cisimler artefakta neden olabilir.

## II. Değerlendirme

EKG kağıdını okurken belirli bir sıra izlemekte yarar vardır. Öncelikle EKG kağıdının kalibrasyonu kontrol edilmelidir. Daha sonra genel bir bakış yapılarak artefaktlar açısından değerlendirilmeli ve okunmayacak derecede kötü çekilmiş bir EKG ise yenilenmesi istenmelidir. EKG kağıdını okumada aşağıdaki gibi bir sıra önerilmektedir:

- A. Ölçümler
- B. Ritim analizi
- C. Kardiyak aksın yönü
- D. İletim analizi
- E. Dalgaların şekli
- F. EKG yorumu
- G. Önceki EKG ile karşılaştırma

Sırasıyla bu bölgelerde nelere dikkat etmemiz gerektiğini ve normalde hangi yapıları göreceğimizi kısaca sıralayalım.

## A. Ölçümler

Elektrokardiyografinin değerlendirilmesi için bazı ölçümlerin doğru bir şekilde yapılması ve bunların normal değerlerinin bilinmesi gerekmektedir.

EKG'de bazı ölçümlerin normal değerleri şunlardır:

Kalp hızı : 60-100 /dakika PR intervali : 0,12-0,20 saniye QRS : 0,06-0,10 saniye Q-T mesafesi :  $\leq 0,42$  saniye

#### B. Ritim analizi

Anormal bir ritim olup olmadığı değerlendirilir.

### C. Kardiyak aksın yönü

Kardiyak aks kalpte oluşan elektriksel aktivitelerin ortalama yönüdür. Bu vektörün yönelimi yukarıdan aşağıya ve sağdan sola doğrudur. Kardiyak aks, dikey planda -30 ile +90 arasındadır.

### D. İletim analizi

S-A düğümden çıkan uyarının ventriküllere kadar iletilmesinin herhangi bir şekilde aksaması "kalp bloğu" olarak adlandırılır. Kalp bloğu 1., 2. ve 3. derece olarak üç kısımda

incelenir. EKG'de PR mesafesinin 0,2 saniyeden uzun olması 1. derece kalp bloğunu gösterir. İkinci derece kalp bloğunda A-V düğüme gelen uyarı zaman zaman aşağı hiç iletilmez. Üçüncü derece kalp bloğu, tam A-V kalp bloğudur ve S-A düğümden gelen uyarı ventriküllere hiç iletilmez. Atrium ve ventriküller birbirlerinden bağımsız olarak çalışırlar.

Ventriküllere ait başlıca iletim kusurları ise sağ dal bloğu ve sol dal bloğudur. Sağ dal bloğu en iyi V1'de görülür ve RSR' oluşur. Sol dal bloğu ise en iyi V6'da görülür ve çift tepeli R dalgası oluşur.

### E. Dalgaların şekli

Sırasıyla P dalgası, QRS kompleksi, ST segmenti ve T dalgası gözden geçirilmelidir. Bu dalgaların birbirleri ile olan ilişkileri, yokluğu ya da şekil değişiklikleri önemli bilgiler verir.

## F. EKG yorumu

EKG'nin belirli bir sistematik içerisinde okunmasında yarar vardır. Hatalı değerlendirmeler ya da tanı atlama engellenmiş olur.

## G. Önceki EKG ile karşılaştırma

Hastanın yeni ve eski EKG'leri tarihlerine göre dizilerek sıra ile değerlendirilmelidir. Bazı kalp rahatsızlıklarında akut ve kronik ayırımını yapmak, tedavi planı açısından önemlidir.

## Kaynaklar

- 1. Set T, Taştan K. Birinci Basamakta EKG ve PA Akciğer Okuma Becerisi Kurs Notları. Türkiye Aile Hekimleri Uzmanlık Derneği Yayınları, Ankara, 2006.
- 2. Acartürk E. Pratik Elektrokardiyografi. İstanbul, Yelken Basım Yayın Sanayi ve Ticaret Ltd. Şti., 2001.
- 3. Akturk Z., Set T., Dagdeviren N., Ozer C. ve M. Akin, "How Satisfactory are the ECG Interpretation Skills of Family Physicians?," Wonca Europe Book of Abstracts and Conference Programme, Ljubljana, 257, 2003.
- 4. Akturk Z., Dagdeviren N., Ungan M., Set T. ve J. Bueno-Ortiz, "Basic ECG Interpretation Skills for Family Physicians," Wonca Europe Book of Abstracts and Conference Programme, Ljubljana, 276, 2003.
- 5. Dagdeviren N., Akturk Z., Set T., Ozer C., Mistik S., Durmus B. ve Unluoglu I., "ECG Interpretation Skills of Family Physicians: A Comparison with Internists and Untrained Physicians", Middle-east Journal of Family Medicine. <a href="http://www.mejfm.com/journal/Nov05/ECG.htm">http://www.mejfm.com/journal/Nov05/ECG.htm</a>, 2005
- 6. Margolis S, Reed R. ECG analysis skills of family practice residents in the United Arab Emirates: a comparison with US data. Fam Med 2001;33(6):447-52.
- 7. Rutten FH, Kessels AGH, Willems FF, Hoes AW. Electrocardiography in primary care; is it useful? Int J Cardiol 2000;74(199-205).
- 8. Grauer K, ECG interpretation remains an important skill. Family Medicine 2000;32(8):519-20.
- 9. Attar E. Özetlenmiş EKG Bilgisi. Ankara, Set Ofset Matbaacılık, 1993.

## Erişkin ve Risk Gruplarında Pnömokok Aşılaması

Prof. Dr. İftihar KÖKSAL

Türkiye EKMUD Erişkin Bağışıklama Çalışma Grubu Başkanı, Karadeniz Teknik Üniversitesi Tıp Fakültesi Enfeksiyon Hastalıkları ve Klinik Mikrobiyoloji Anabilim Dalı Başkanı

Enfeksiyon hastalıklarına bağlı ölümlerin önlenmesinde temiz su sağlanması dışında en etkili yöntem aşılamadır. Aynı zamanda aşılar, koruyucu sağlık hizmetleri içinde de en etkili yöntemdir.

Aşıların hem bireysel hem de toplumsal açılardan önemi ve yararı vardır. Günümüzde, aşılar sayesinde: 25 enfeksiyon hastalığı önlenmekte ya da kontrol altına alınmaktadır. Aşılama ile her yıl: 2.7 M kızamık, 2 M neonatal tetanoz, 1 M boğmaca, 600.000 paralitik poliyo 300.000 difteri olgusu önlenebilmektedir. Aşılanmayan çocuklarda, aşılananlara oranla: 23 kat daha fazla boğmaca, 9 kat daha fazla su çiçeği, 6,5 kat daha fazla pnömoniden hastaneye yatış riski bulunmaktadır.

Erişkin bağışıklama çocukluk aşılamasına göre daha karmaşıktır. Aşılamada Hekime büyük iş düşüyor. Hekimin önerisi, aşılanma oranlarını arttırıyor. Örneğin doktor önermesi durumunda grip aşısı kullanımı %79 oranında artmıştır.

Ülkemizde Tetanoz, difteri ve boğmaca aşısı, grip aşısı, pnömokok aşısı, hepatit A ve B aşıları, zoster aşısı, su çiçeği, kımaık-kızamıkçık-kabakulak aşısı, Hib aşısı, meningokok ve HPV aşıları erişkinlere önerilen aşılardır.

Bu aşılardan pnömokok aşıları risk grupları başta olmak üzere erişkinlerde mortalite ve morbiditeyi önleme bakımından en önemli aşılardandır.

S. pneumoniae, diğer ismi ile pnömokoklar hem çocuklar hem de özellikle 65 yaşın üzerindeki erişkinlerde otit, sinüzit ve pnömoni ve bakteremiye neden olabilirler. Topluk Kökenli Bakteriyel pnömoninin en yaygın nedeni Streptococcus pneumoniae olup, Ölümcül seyir riskine sahiptir. Dünyada yılda 1,6 milyon kişi pnömoni ve pnömokok hastalıkları nedeniyle hayatını kaybetmektedir. Avrupa'da ve ülkemizde pnömoni etkenleri arasında ilk sırada yer alan bir bakteridir.

Pnömokoklar enfekte kişilerden aerosol şeklinde yayılarak diğer bireylerin nazofarenksine kolonize olur. Ya asemptomatik kolonizasyon yapar ya da otit, sinüzit, pnömoni, gibi invaziv olmayan bir enfeksiyona ya da bakteremi ve menenjit gibi invaziv enfeksiyonlara (İPH) neden olabilir. Pnömoni vakalarının %25'i invaziv seyir gösterebilir. Hastalığın şiddeti bakterinin serotipine göre değişmektedir. İnvaziv pnömokokal pnömoni, non-invaziv hastalığa göre daha fazla pulmoner ve ekstrapulmoner komplikasyonla ilişkilidir.

İPH ve pnömokokal pnömoni riski, konak ve çevresel faktörlerden etkilenir. Bu etkilenim tabloda özetlenmiştir.

Tablo: Pnömokok enfeksiyonlarında risk faktörleri

|                     | Konak faktörler  |  |   |                              |
|---------------------|--|--|---|------------------------------|
| Yaş                 | Riskli grup  | Yüksek riskli grup   | Çevresel<br>faktörler   | Davranış<br>faktörleri       |
| ≤ 2 yaş<br>≥ 65 yaş | Kronik kalp hastalığı Kronik akciğer hastalığı Diyabet Fonksiyonel veya anatomik aspleni Kronik karaciğer hastalığı Serebrospinal sıvı kaçakları | HIV enfeksiyonu Kronik böbrek yetmezliği, nefrotik sendrom Kanser (solid ve hematolojik) Solid organ transplantasyonu Otoimmün hastalıklar İmmünsüpresif tedavi ve kortikosteroidler Primer immün yetmezlikler | Geçirilmiş viral<br>solunum yolu<br>enfeksiyonu<br>(örn. influenza)<br>Bir kurumda<br>konaklama (örn.<br>bakım evi) | Sigara<br>Alkol<br>kullanımı |

Tabloda da görüleceği üzere erişkinlerde 65 yaş üzerinde olmak önemli bir risk faktörüdür. Yapılan çalışmalar tüm dünyada ve ülkemizde yaşla birlikte pnömoni insidansının ve mortalite oranlarının artış gösterdiğini ortaya koymaktadır. Altta yatan pnömoni ve influenza nedeniyle yıllık ortalama influenzaya bağlı ölümler, 65 yaş üzeri kisilerdeki mortalitenin yaklaşık %88'ini oluşturmaktadır.

Toplumda gelişen pnömoni hastalarının %40'ı hastaneye yatırılarak tedavi edilmek durumunda kalmaktadır. Pnömokoklara karşı gelişen antibiyotik direnci, pnömokok hastalıklarının tedavisinde önemli bir engel oluşturmaktadır. Toplumda gelişen her 10 pnömoni hastasından biri hayatını kaybetmektedir. Tüm bu nedenlerle erişkinlerde pnömokok hastalıkları beraberinde önemli yükler getirmektedir.

Pnömokokal hastalıklarda riski azaltmak ve olası hastalıkları önlemek için bağışıklama önemli yere sahiptir. Giderek artan antibiyotik direnci nedeni ile pnömokokların neden olduğu enfeksiyonları tedavi etmek giderek zorlaşmaktadır. Pnömokokal infeksiyonlardan korunmak, işe yaramayan dirençli antibiyotiklerle tedavi etmeye çabalamaktan daha etkin ve kolay bir yoldur.

Erişkinlerde kullanılan kapsül antijenlerini içeren iki tür pnömokok aşısı vardır: 23 Valanlı polisakkarit aşı ve 13 valanlı konjuge aşı. Bu aşılar en sık görülen serotiplerin çoğunu kapsamaktadır. Avrupa genelinde görülen en sık 10 serotip 3, 8, 22F, 19A, 7F, 12F, 1, 9N, 15A ve 24F'dir. 13-valanlı konjuge pnömokok aşısının kapsama oranı %58,2'dir.

23-Valanlı Pnömokokal Polisakkarid Aşı (PPA-23), pnömokokal kapsül polisakkaridlerinin 23 farklı serotipini içeren bir aşıdır. 65 yaş ve üzeri grupta ve 2-65 yaş arası risk gruplarında endikedir. 2 yaştan küçük çocuklarda koruma sağlamaz. T-hücre immünitesini uyarmaz ve İmmünolojik bellek oluşturmaz. Daha geniş bir serotip grubunu kapsamasına rağmen, immünojenitesi düşüktür. Kolonizasyonu etkilemediği için otit, sinüzit veya bronşiti engellemez.

13 Valanlı Konjuge Pnömokok Aşısı (PCV13), T bağımsız yanıtı T bağımlı hale getirir. T-helper hücreleri uyararak 2 yaşından küçüklerde bağışıklık sağlar. Antijenle yeniden karşılaşma güçlü booster yanıtını oluşturur. Primer immünizasyonla ömür boyu bağışıklık sağlanabilir. Koruyuculuk ve etkinlik süresi 4 yıldan uzundur. Erişkinlerde Toplumda Gelişen Pnömoni İmmünizasyon Çalışması (CAPITA), 13 valanlı konjuge pnömokok aşısının

tüm risk gruplarındaki erişkinleri pnömokoksik pnömoniden korumada etkin olduğunu ortaya koymuştur.

Pnömokok aşıları ile ilgili olarak ülkemizde en önemli başvuru kaynağı, Türkiye Enfeksiyon Hastalıkları ve Klinik Mikrobiyoloji Uzmanlık Derneği (EKMUD) tarafından 9 uzmanlık derneği ile birlikte hazırlanan Erişkin Bağışıklama Rehberidir. Bu rehber ve Sağlık Bakanlığı Altta Yatan Kronik Hastalığı Olan Bireylerde Pnömokok Aşılaması önerisi:

Konjuge pnömokok aşısı (KPA) ve polisakkarit pnömokok (PPA23) aşılaması açısından yüksek risk altındaki kişiler:

Kronik kalp hastalığı olan (özellikle siyanotik konjenital kalp hastalığı ve kardiyak yetmezlik); kronik akciğer hastalığı (astım hastaları dâhil), diabetes mellitus, BOS kaçağı, kohlear implant, orak hücreli anemi ve diğer hemoglobinopatiler, fonksiyonel ya da anatomik aspleni, HIV enfeksiyonu, kronik renal yetmezlik, nefrotik sendromu içeren immün sistemi baskılanmış kişiler, radyasyon terapisi ya da immunsupresif tedavi verilen hastalıklar, Hodgkin hastalığı ve malign kanserler lenfoma, lösemi, yaygın malignensi, solid organ transplantasyonu, konjenital ya da edinsel immun yetmezlikler, multiple miyelom, alkolizm, kronik karaciğer hastalığı olan kişilerdir.

Türkiye EKMUD kılavuzundan alınan alttaki tablolarda erişkin aşı şemaları yer almaktadır:

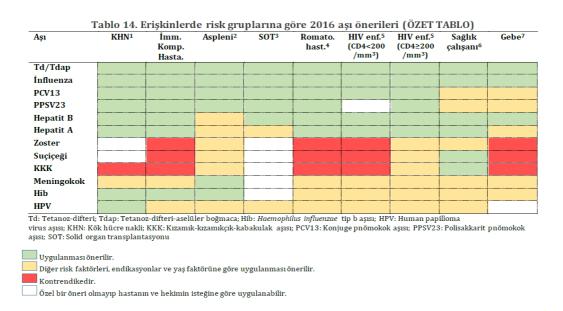


10: 1etanoz-difteri; 1dap: 1etanoz-difteri-asetuler bogmaca; Hib: Haemophilus influenzae tip b aşısı; HPV: Human papilloma virus aşısı; KKK: Kızamık-kızamıkçık-kabakulak aşısı; PCV13: Konjuge pnömokok aşısı; PPSV23: Polisakkarit pnömokok aşısı.

Tüm erişkinlere uygulanması önerilir.

Risk faktörü veya endikasyonu olan erişkinlere uygulanması önerilir.

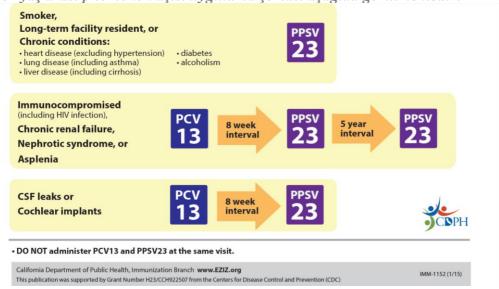
Özel bir öneri olmayıp hastanın ve hekimin isteğine göre uygulanabilir.



## Pnömokok aşısı uygulanırken dikkat edilmesi gereken noktalar:

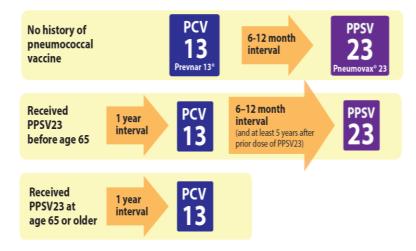
- PCV13 & PPSV23 aynı vizitte verilmemelidir
- Eğer ikisine de ihtiyaç varsa, PCV13 önce verilmelidir
- PPSV23 yapıldıysa, PCV13 en az 1 bir yıl sonra yapılmalıdır
- PCV13 yapıldıysa, PPSV23 en az 8 hafta sonra yapılmalıdır
- Eğer iki aşı aynı anda ya da 8 haftadan kısa süre içerisinde yapıldıysa, erişkinlerde dozu tekrarlamaya gerek yoktur
- Erişkin hayat boyunca tek doz PCV13 önerilmektedir
- ≥ 65 yaş tek doz PPSV23 yapılmalıdır
- PPSV23 önerilen durumlarda erişkin hayatta en fazla 3 kez önerilmekte, aralarında en az 5 yıl olmalıdır

## 19-64 yaş arası pnömokok aşısı uygulama şeması aşağıda görülmektedir:



## 65 yaş ve üzeri pnömokok aşısı uygulama şeması aşağıda görülmektedir:

• If PCV13 was given before age 65 years, no additional PCV13 is needed.



Alttaki tabloda risk durumuna göre pnömokok aşıları arasında olması geren süre yer almaktadır.

Tablo 4. Risk durumlarına göre pnömokok aşıları arasındaki olması

| Risk durumu  | Önce konjuge aşı<br>yapıldıysa<br>polisakkarit aşı<br>için gereken süre |                | Önce polisakkarit<br>aşı yapıldıysa<br>konjuge aşı için<br>gereken süre |          |
|--|---|----------------|---|----------|
|  | 19-64   | ≥ 65 yaş       | 19-64   | ≥ 65 yaş |
| Riskli durum yok*  | yaş<br>≥1 yıl*  | ≥ 1 yıl        | yaş<br>≥1 yıl*  | ≥ 1 yıl  |
| -Kronik kalp hastalığı -Kronik akciğer hastalığı -Diabetes mellitus -Alkolizm -Kronik karaciğer hastalığı -Siroz -Sigara içiciliği   | ≥8 hafta  | ≥ <b>1</b> yıl | ≥ 1 yıl   | ≥ 1 yıl  |
| -BOS kaçağı<br>-Kohlear implant  | ≥8 hafta  | ≥ 8 hafta      | ≥ 1 yıl   | ≥ 1 yıl  |
| -Fonksiyonel ya da anatomik<br>aspleni   | ≥8 hafta  | ≥8 hafta       | ≥ 1 yıl   | ≥ 1 yıl  |
| -Konjenital ya da kazanılmış immünyetmezlik -HIV enfeksiyonu -Kronik böbrek yetmezliği -Nefrotik sendrom -Lösemi -Lenfoma -Hodgkin hastalığı -Multipl myelom -Yaygın malignite -Solid organ transplantasyonu -İmmünsupresif tedavi | ≥8 hafta  | ≥8 hafta       | ≥ 1 yıl   | ≥ 1 yıl  |

<sup>\*</sup>Risk durumu olmayan hasta kendisi aşılanmışsa ve aşıyı kendisi talep ediyorsa

Sonuç olarak, Erişkinde pnömokokal aşılama stratejileri geliştirmek için birçok değişken mevcuttur. Erişkin aşılama çocuklardaki kadar kolay değildir. Aşı var ancak aşılanacak kişi ve aşı öneren kişi kaynaklı sorunlar var. Önceliğin risk gruplarına verilmesi daha kolay olabilir. Aşılamada başarı birlikte hareket ederek mümkün olacaktır.