

TÜRKİYE ENDOKRİNOLOJİ VE METABOLİZMA DERNEĞİ BÜLTENİ



Üç ayda bir online yayınlanır

Sayı 80 • Ekim – Kasım – Aralık • 2022

MEZUNİYET SONRASI EĞİTİM KURSU - ENDOKURS 6 TAMAMLANDI

6. Mezuniyet Sonrası Eğitim Kursu (ENDOKURS-6), 13-16 Ekim 2022 tarihleri arasında HiltonSa Hotel, Adana'da 257 meslektaşımızın katılımı ile başarılı bir şekilde gerçekleştirildi.

Endokrinoloji ve Metabolizma hastalıklarının her alanından deneyimli hocalar tarafından sunulan kursta 12 Konferans, 8 Panel, 4 Uydu Sempozyumu, 2 ustalarla kahvaltı oturumu ve 1 adet atölye çalışması yer almıştır.

6. Mezuniyet Sonrası Eğitim Kursu'nda 22 adet sözlü ve 74 adet poster olmak üzere toplam 96 bildiri sunuldu, sözel ve poster bildiri ödülllerimiz için yapılan değerlendirmeler sonucunda 3 sözlü bildiriye ve ikincilik ödülünü 2 adet bildirinin paylaştığı toplamda 4 poster bildiriye ödül verilmiştir.

Emeği geçen tüm meslektaşlarımıza teşekkür eder, başarılar dileriz.

Prof. Dr. Ayşegül Atmaca
Kurs Başkanı

Prof. Dr. Murat Sert
Kurs Bilimsel Sekreteri

Prof. Dr. Melek Eda Ertörer
Kurs Bilimsel Sekreteri



SÖZLÜ BİLDİRİ ÖDÜLLERİ**SÖZLÜ BİLDİRİ BİRİNCİLİK ÖDÜLÜ (S-07)****İYİ DİFFERANSİYE OLUP METASTAZ YAPAN NÖROENDOKRİN TÜMÖRLERİN KLİNİKOPATOLOJİK ÖZELLİKLERİ: ERCİYES NET GRUBU VERİLERİ**

Canan Şehit Kara¹, Emin Samet Saraç², Figen Öztürk³, Ümmühan Abdulrezzak⁴, Tutkun Talih⁵, Gülten Can Sezgin⁶, Alper Yurcu⁶, Şebnem Gürsoy⁶, Metin Özkan⁷, Erdoğan Sözüer⁵, Fahri Bayram¹

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⁷Erciyes Üniversitesi Tıp Fakültesi, Onkoloji Bilim Dalı, Kayseri

SÖZLÜ BİLDİRİ İKİNCİLİK ÖDÜLÜ (S-02)**ANTI-MÜLLERİAN HORMON DÜZEYİNİN POLİKİSTİK OVER SENDROMU FENOTİPLERİ VE OVER MORFOLOJİSİ İLE İLİŞKİSİ**

M. Masum Canat, Yüksel Altuntaş
Sağlık Bilimleri Üniversitesi, İstanbul Şişli Hamidiye Etfal Eğitim ve Araştırma Hastanesi, Endokrinoloji ve Metabolizma Hastalıkları Kliniği

SÖZLÜ BİLDİRİ ÜÇÜNCÜLÜK ÖDÜLÜ (S-18)**TALASEMİ MAJOR HASTALARINDA ENDOKRİN BOZUKLUKLARIN PREVALANSI VE FERRİTİN DÜZEYLERİ İLE İLİŞKİSİ: TÜRKİYE'NİN GÜNEYİNDE TEK MERKEZ DENEYİMİ**

Leyla Batmaz¹, Fatma Aykaç², Gönül Oktay³, Emine Uslu Yurteri⁴

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POSTER BİLDİRİ ÖDÜLLERİ**POSTER BİLDİRİ BİRİNCİLİK ÖDÜLÜ (P-49)****HER LİTİK LEZYON MALİGNİTE MİDİR?**

Ensar Aydemir, Coşkun Ateş, Filiz Mercan Sarıdaş, Erhan Hocaoglu, Müge Yaşar, Soner Cander, Özen Öz Gül, Canan Ersoy, Erdinç Ertürk
Bursa Uludağ Üniversitesi Tıp Fakültesi, İç Hastalıkları Anabilim Dalı, Endokrinoloji Bilim Dalı

POSTER BİLDİRİ İKİNCİLİK ÖDÜLÜ (P-58)**STANDART GÖRÜNTÜLEME YÖNTEMLERİ İLE LOKALİZE EDİLEMİYEN VEYA UYUMSUZ SONUÇLAR ELDE EDİLEN PRİMER HİPERPARATİROİDİLİ OLGULARDA 4 BOYUTLU BİLGİSAYARLI TOMOGRAFİ'NİN YERİ**

Nagihan Kolkıran¹, Nilüfer Özdemir², Yüksel Pabuşçu³, Zeliha Hekimsoy²

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POSTER BİLDİRİ İKİNCİLİK ÖDÜLÜ (P-57)**COVID-19 PANDEMİSİNİN SUBAKUT TİROİDİT İNSİDANSI, MEVSİMSSEL DAĞILIMI VE KARAKTERİSTİKLERİ ÜZERİNE ETKİSİ: TÜRKİYE'DEN TEK MERKEZ DENEYİMİ**

Hayri Bostan, Muhammed Erkam Sencar, Murat Çalapkulu, Serdar Kayhan, Sema Hepşen, Aykut Çimşir, Ümrân Gül, İlknur Öztürk Ünsal, Özgür Özçelik, Muhammed Kızılgül, Bekir Uçan, Erman Çakal

Sağlık Bilimleri Üniversitesi, Dışkapı Yıldırım Beyazıt Eğitim ve Araştırma Hastanesi, Endokrinoloji ve Metabolizma Hastalıkları Bilim Dalı, Ankara

POSTER BİLDİRİ ÜÇÜNCÜLÜK ÖDÜLÜ (P-17)**HİPERGLİSEMİ İLİŞKİLİ HEMİKORE-HEMİBALLİSMUS**

Ayşe Özdemir Yavuz, Selin Genç, Bahri Evren, İbrahim Şahin
İnönü Üniversitesi Tıp Fakültesi Endokrinoloji Bilim Dalı, Malatya

ENDOKRİNOLOJİDE FARK YARATACAK AKADEMİSYENLER TAMAMLANDI



Akademik gelişimde önemli katkıları olduğuna inandığımız Endokrinolojide Fark Yaratacak Akademisyenler programı 24-26 Kasım 2022 tarihleri arasında İstanbul'da 20 genç meslektaşımızın katılımı ile yüz yüze gerçekleştirilmiştir. Emeği geçen tüm meslektaşlarımıza teşekkür eder, başarılar dileriz.

SAMSUN TİROİD USG KURSU TAMAMLANDI



Tiroid USG Kursu, 10 Aralık 2022 tarihinde Samsun Anemon Otel'de yaklaşık 30 meslektaşımızın katılımı ile başarılı bir şekilde gerçekleştirilmiştir. Emeği geçen tüm meslektaşlarımıza teşekkür eder, başarılar dileriz.

KONYA TİROİD USG KURSU TAMAMLANDI

Tiroid USG Kursu, 24 Aralık 2022 tarihinde Konya Dedeman Hotel'de yaklaşık 35 meslektaşımızın katılımı ile başarılı bir şekilde gerçekleştirilmiştir. Emeği geçen tüm meslektaşlarımıza teşekkür eder, başarılar dileriz.



OLGU MARATONU

Yürütücülüğünü Prof. Dr. İbrahim Şahin'in yaptığı Olgular Maratonu programına 33 genç meslektaşımızın gönderdiği olgular her çalışma grubundan bir kişi olacak şekilde Prof. Dr. Ayşe Nur İzol Torun, Prof. Dr. Engin Güney, Prof. Dr. Güzin Fidan Yaylalı, Prof. Dr. Mustafa Şahin, Prof. Dr. Serpil Salman, Prof. Dr. Tevfik Demir, Prof. Dr. Tevfik Sabuncu, Prof. Dr. Zeynep Cantürk, Prof. Dr. Züleyha Karaca hocalarımızdan oluşan 9 kişilik değerlendirme kurulu tarafından değerlendirilmiş ve en yüksek puanı alan 5 olgu, sahipleri tarafından, moderatörlüğünü Prof. Dr. Ayşegül Atmaca ve Prof. Dr. İbrahim Şahin'in yaptığı 20 Aralık 2022 tarihinde gerçekleşen canlı yayında sunulmuştur. En yüksek puan alan 5 olgunun sahipleri; birinci Dr. Tuğba Barlas, ikinci Dr. Sedat Can Güney, üçüncü Dr. Hülya Hacışahinoğulları, dördüncü Dr. Deniz Çetin ve beşinci Dr. Sena İlin'dir.

Emek ve değerli zamanlarını harcayan değerlendirme kurulu üyelerine, olgu göndererek maratona katılan tüm üyelerimize teşekkür ederiz.

KATILIMINIZ İÇİN TEŞEKKÜR EDERİZ



"OLGU MARATONU" Canlı Yayınımız

**33 OLGU KATILIMI
İLE BAŞARI İLE
GERÇEKLEŞTİRİLMİŞTİR
İLK 5 FİNALİSTİMİZ ÖDÜLE
HAK KAZANMIŞTIR**

OLGULARLA OSTEOPOROZ TEDAVİSİNDE MERAK EDİLENLER: ANTİREZORBTİF TEDAVİ, ANABOLİK TEDAVİ, ARDIŞIK TEDAVİLER

MODERATÖR
Prof. Dr. Zeynep Cantürk
Kocaeli Üniversitesi Tıp Fakültesi Endokrinoloji ve Metabolizma Hastalıkları Bilim Dalı, Kocaeli

MODERATÖR
Prof. Dr. İbrahim Şahin
İnönü Üniversitesi Tıp Fakültesi Endokrinoloji ve Metabolizma Hastalıkları Bilim Dalı, Malatya

KONUŞMACI
Prof. Dr. Özen Öz Gül
Uludağ Üniversitesi Tıp Fakültesi Endokrinoloji ve Metabolizma Hastalıkları Bilim Dalı, Bursa

KONUŞMACI
Doç. Dr. Ceyla Konca Değertekin
Ufuk Üniversitesi Tıp Fakültesi Endokrinoloji ve Metabolizma Hastalıkları Bilim Dalı, Ankara

KONUŞMACI
Doç. Dr. Özlem Turhan İyidir
Baskent Üniversitesi Tıp Fakültesi Endokrinoloji ve Metabolizma Hastalıkları Bilim Dalı, Ankara

24 Ekim 2022 Pazartesi SAAT : 20:00

CANLI



WHO 2022 TİROİD TÜMÖR SINIFLANDIRMASI AÇISINDAN TİROİD PATOLOJİSİNE ALGORİTMİK YAKLAŞIM

MODERATÖR
Prof. Dr. Mustafa Şahin
Ankara Üniversitesi Tıp Fakültesi Endokrinoloji ve Metabolizma Hastalıkları BD, Ankara

MODERATÖR
Prof. Dr. Erman Çakal
Sağlık Bilimleri Üniversitesi, Ankara Estetik Şehir Hastanesi, Endokrinoloji ve Metabolizma Hastalıkları Kliniği, Ankara

KONUŞMACI
MD, PhD Zubair W. Baloch
Pennsylvania Üniversitesi Perelman Tıp Fakültesi Patoloji Bilim Dalı, ABD

28 Kasım 2022 Pazartesi SAAT : 19:00

Türkçe-İngilizce Simultane Çeviri Yapılacaktır.

CANLI

OLGULARLA OTONOM KORTİZOL SEKRESYONUNA YAKLAŞIM

MODERATÖR
Prof. Dr. Engin GÜNEY
Adrenal ve Coradad Hastalıkları Çalışma Grubu Başkanı

KONUŞMACI
Doç. Dr. Mustafa Ünübol
Aydın Adnan Menderes Üniversitesi Tıp Fakültesi Endokrinoloji ve Metabolizma Hastalıkları Bilim Dalı

KONUŞMACI
Doç. Dr. Banu Şarer Yürekli
Ege Üniversitesi Tıp Fakültesi Endokrinoloji ve Metabolizma Hastalıkları Bilim Dalı

KONUŞMACI
Prof. Dr. Alparslan Ünsal
Aydın Adnan Menderes Üniversitesi Tıp Fakültesi Radyoloji Anabilim Dalı

KONUŞMACI
Prof. Dr. Özer Makay
Ege Üniversitesi Tıp Fakültesi Genel Cerrahi Anabilim Dalı

30 Kasım 2022 Çarşamba SAAT : 20:00

CANLI



MULTİDİSİPLİNER BAKIŞ AÇISIYLA YAŞLI ERİŞKİNLERDE DİYABET YÖNETİMİ

MODERATÖR
Prof. Dr. Serpil Salman
Dişabet Bilimsel Çalışma Grubu Başkanı

MODERATÖR
Prof. Dr. Alper Sönmez
Ankara Güven Hastanesi Endokrinoloji ve Metabolizma Hastalıkları Bölümü

KONUŞMACI
Doç. Dr. Gülşah Yenidünya Yalın
İstanbul Üniversitesi İstanbul Tıp Fakültesi İç Hastalıkları Anabilim Dalı, Endokrinoloji BD

KONUŞMACI
Prof. Dr. Gülistan Bahat Öztürk
İstanbul Üniversitesi İstanbul Tıp Fakültesi İç Hastalıkları Anabilim Dalı, Geriatri BD

KONUŞMACI
Doç. Dr. Zeynep Tüfekçioğlu
Bıruni Üniversitesi Tıp Fakültesi, Nöroloji ABD

13 Aralık 2022 Salı SAAT : 20:00

CANLI

ENDOKRİN AKADEMİ YENİ MODÜLLERİMİZ





29 EKİM
CUMHURİYET BAYRAMIMIZ
KUTLU OLSUN



TÜRKİYE
ENDOKRİNOLOJİ VE
METABOLİZMA
DERNEĞİ

10
KASIM
1881-1938

Saygıyla Anıyoruz



TÜRKİYE
ENDOKRİNOLOJİ VE
METABOLİZMA
DERNEĞİ

24
KASIM
ÖĞRETMENLER GÜNÜ
Kutlu Olsun



TÜRKİYE
ENDOKRİNOLOJİ VE
METABOLİZMA
DERNEĞİ

3 Aralık
Dünya
Engelliler
Günü

*Sevgi varsa
Engel yoktur.*



YENİ YILIN
MUTLULUK GETİRMESİ
DİLEĞİYLE...

Yeni Yılınaız Kutlu Olsun



TÜRKİYE
ENDOKRİNOLOJİ VE
METABOLİZMA
DERNEĞİ



44. TÜRKİYE ENDOKRİNOLOJİ ve METABOLİZMA HASTALIKLARI KONGRESİ

12-13 MAYIS 2023
THE MARMARA TAKSİM
İSTANBUL



Bilimsel Sekreteryası
Türkiye Endokrinoloji ve Metabolizma
Derneği
Meşrutiyet Cad. Ali Bey Apt.
No:29 D:12, 06420 Kızılay
Çankaya - Ankara T: 0312 425 20 72
info@temd.org.tr www.temd.org.tr



Organizasyon Sekreteryası
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feniks@feniksturizm.com.tr
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www.temhk.org



TÜRKİYE
ENDOKRİNOLOJİ VE
METABOLİZMA
DERNEĞİ

ENDOKURS

7

Mezuniyet Sonrası
Eğitim Kursu
26-29 Ekim 2023
Bursa

100
Cumhuriyetimizin 100. Yılı



Feniks
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20 EKİM DÜNYA OSTEOPOROZ GÜNÜ BASIN BİLDİRİSİ

Dünya Osteoporoz Günü, her yıl 20 Ekim'de kutlanmakta, osteoporoz ve ilgili kas-iskelet sistemi hastalıklarının önlenmesi, teşhisi ve tedavisi konusunda küresel farkındalığın artırılması hedeflenmektedir.

Hali hazırda osteoporoz büyük ölçüde yetersiz teşhis edilmekte ve yeterince tedavi edilmemektedir. Dünya çapında, kemik kırığı açısından yüksek risk altında olan milyonlarca insan, sessiz hastalıktan habersizdir. Hastalığın sosyoekonomik yükü ve ciddi kırıkların hastaların bağımsızlığı üzerindeki etkisi ne yazık ki yeterince dikkate alınmamaktadır.

Osteoporoz, 'gözenekli kemik' anlamına gelmektedir, kemiklerin incilmesi durumudur.

Kemikler yoğunlukları azaldıkça ve kaliteleri düştükçe güçlerini kaybetmekte, ağrı ve sakatlığa neden olabilecek kemik kırıkları gelişebilmektedir.

Nüfusun giderek yaşlanması nedeniyle daha çok karşılaşılmakta olan osteoporoz, toplumlara hem ekonomik hem de sosyal bir yük getirmektedir. Menopoz sonrası dönemde yaygın olarak görülen osteoporoz, sadece kadınların hastalığı olmayıp, erkekleri de etkilemektedir. 50 yaşın üzerindeki her 3 kadından birinin ve her 5 erkekte birinin hayatının bir döneminde kırık yaşayacağı öngörülmekte, tüm dünyada her üç saniyede bir kırık olduğu ve yılda 9 milyon kırık vakası olduğu tahmin edilmektedir. 2050 yılında, 1990'a kıyasla kalça kırığı insidansının erkeklerde %310 ve kadınlarda %240 oranında artacağı tahmin edilmektedir. Ülkemizde yapılan çalışmalarda da 50 yaş üzerindeki her 4 kişiden birinde osteoporoz bulunduğu belirlenmiştir.

Osteoporoz nedeniyle oluşan bu kemik kırıkları, yaşam kalitesini bozmakta, kişinin hareket kabiliyetini kısıtlamakta, başkalarına bağımlı hale gelmesine neden olmaktadır. Birçok hasta, küçük bir düşme veya çarpmadan sonra bir kırık gelişinceye kadar hastalıklarından haberdar olmadığı için genellikle "sessiz hastalık" olarak adlandırılmaktadır.

Osteoporoz kadınların meme kanserinden, kalp krizinden, diyabet ve diğer birçok hastalıktan daha fazla hastanede yatarak tedavi görmesine neden olmaktadır. Erkeklerde yaşam boyu kırık riski prostat kanserinden daha fazladır. Omurga kırıkları, sırt ağrısına, boy kısalığına, şekil bozukluğuna, hareketsizliğe, yatakta geçirilen günlerin artmasına ve solunum fonksiyonlarının azalmasına neden olabilmektedir.

Osteoporoza bağlı omurga kırığı olan bir kadının 5 yıl içinde bir başka kırık geçirme riski %25'dir. Kalça kırığından sonra hastaların yaklaşık %60'ı yardıma ihtiyaç duymakta ve %20'si

uzun süreli hemşirelik bakımı gerektirmekte ve ilk bir yıl içinde %20-24 oranında ölüm görülmektedir.

Kalça kırığı olan hastaların %55'inden fazlasında daha önce vertebra kırığı olduğuna dair kanıtlar vardır. Önceki bir kırık, özellikle ilk iki yılda olmak üzere herhangi bir kırık riskinin %86 oranında artmasıyla ilişkilidir. Yani bir kırık sonraki kırık için büyük risk yaratmaktadır.

Kırığı sonra, hastaların yaklaşık %80'ine hala teşhis konulmadığı ve kırığa neden olan osteoporozun uygun şekilde tedavi edilmediği düşünülmekte, omurga kırıklarının sadece 1/3'ünün klinik olarak dikkat çektiği tahmin edilmektedir.

Osteoporoz için kimler taranmalıdır?

65 yaş üzeri bütün kadınlar ve 70 yaş üstü bütün erkekler kemik mineral yoğunluğu ölçümü ile taranmalı, sonuç normal bulunursa birkaç yılda bir tekrar edilmelidir.

65 yaşın altında olup menopozda olan hanımlar ile 50-70 yaş arası erkeklerde ise kırık için aşağıdaki risk faktörlerinden herhangi biri varsa yine tarama yapılmalıdır:

Boy yüksekliğinden az bir mesafeden düşmekle kırık gelişmişse, üç aydan uzun süre ≥ 5 mg/gün prednisolon ya da eşdeğeri glu-

kokortikoid (kortizon tedavisi) kullanımı varsa, romatizmal bir hastalığa sahip olmak, sigara ve aşırı alkol tüketimi, boyda 4 cm' den fazla kısalma, düşük vücut ağırlığı, geç adet görme, 45 yaşından erken menopoza girme, ailede kalça kırığı bulunması durumlarından herhangi birisi varsa mutlaka bir hekime başvurularak gerekli taramalar yapılmalıdır.

Osteoporoz önlenabilir ve tedavi edilebilir bir hastalıktır

Çocukluktan itibaren düzenli beslenme ve egzersiz ile osteoporoz önlenabilir, tanı konduğu zaman tedavi edilerek kırıklar önlenabilir.

Kemik sağlığınız için adım atınız, riskiniz varsa harekete geçiniz, tarama ve gerekiyorsa tedavi için geç kalmayınız !!!



14 KASIM DÜNYA DİYABET GÜNÜ BASIN BİLDİRİSİ

Diyabet (şeker hastalığı) toplumda oldukça sık rastlanan bir sağlık sorunudur. Halen tüm Dünya'da 10 erişkinden biri diyabetlidir. Hastalığın sıklığı giderek artmaktadır. 2030 yılında her 9 erişkinden birinin diyabetli olacağı tahmin edilmektedir.

Pankreasta insülin üretilmediği için kan şekerinin çok yükseldiği, genelde çocukluk çağında görülen tip 1 diyabet, insülinin keşfinden önce ölümcül bir hastalıktı. Dr. Frederick Banting ve arkadaşları tarafından 1921 yılında insülinin bulunup ilaç olarak kullanılmasından sonra, milyonlarca diyabet hastasının hayatı kurtulmuş oldu. Hastalığın öneme dikkat çekmek ve farkındalığı artırmak amacı ile Banting'in doğum günü olan 14 Kasım ve haftasında, 1991 yılından beri Dünya Diyabet Günü aktiviteleri yapılmaktadır. Bu aktivitelere 160'dan fazla ülkede bir milyardan fazla kişi destek vermektedir.

14 Kasım Dünya Diyabet Günü'nün yaklaştığı bu günlerde diyabetle ilgili olarak aşağıdaki konulara dikkatinizi çekmek isteriz;

Diyabet toplumun büyük kesimini ilgilendiren ve sıklığı giderek artan bir hastalıktır, ancak diyabetlilerin birçoğu hastalığının farkında değildir

Diyabet yaşam boyu süren, kronik bir hastalıktır. Oluşumunda iki temel sorundan biri rol oynar; Pankreasın yeterli insülin hormonu üretememesi (Tip 1 diyabet) veya üretilen hormonun dokular tarafınca yeterince kullanılamaması (Tip 2 diyabet). Tip 1 diyabet daha çok çocukluk çağında, tip 2 diyabet ise erişkinlerde görülür. Son yıllarda obezitenin artışıyla çocukluk çağında da tip 2 diyabet görülmeye başlamıştır.

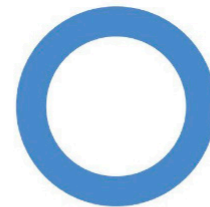
Kan şekerinin çok yükselmesi diyabetin tipik klinik yakınmaları olan çok idrar yapma, çok su içme, ağız kuruması gibi yakınmalarla kendisini belli eder. Tüm diyabet olgularının %90'ını tip 2 diyabet oluşturur. Tip 2 diyabet genellikle kilo fazlalığı zemininde gelişir ve çoğu hastada kan basıncı ve kan yağlarının yüksekliği ile birlikte seyredir. Bu olgularda şeker yüksekliği başlangıçta çok fazla olmadığı için şikayetler genellikle geç ortaya çıkar. Bu nedenle hastalar bazen yıllarca, diyabet olduklarını fark etmeyebilirler. Her iki diyabetliden biri diyabetinin farkında değildir ama bu kişilerde hastalık bir yandan kalp damar sistemi başta olmak üzere birçok organa zarar vermektedir. Ailesinde tip 2 diyabet öyküsü olanlarda diyabete yakalanma riski daha fazla olduğu ve bu kişilerin daha da dikkatli araştırılması gerektiği bilinmelidir. Dünyanın diğer ülkelerinde olduğu gibi ülkemizde de sosyoekonomik seviyesi daha düşük olan kesimlerde diyabet farkındalığı daha azdır.

Dünyada yaklaşık 537 milyon diyabet hastası olduğu düşünülmektedir ve bu rakam hızla artmaktadır. Tüm dünyada körlüğün, böbrek yetmezliğinin, travmaya bağlı olmayan bacak kayıplarının, kalp krizi ve inmelerin en sık nedeni diyabetir. Türkiye Avrupa'da diyabetin en sık görüldüğü ülkedir. Epidemiyolojik araştırmalara göre 1997 yılında %7.2 olan diyabetli oranı 2010 yılında %13.7'ye çıkmıştır. Tahminler, ülkemizde güncel diyabet oranının %15 civarında olduğu yönündedir. Bu artış devam ederse ülkemiz 2045 yılında, dünyada erişkin toplumda en fazla diyabetlinin yaşadığı ilk 10 ülke arasına girecektir. Oysa sadece sağlıklı beslenip, hareketli bir hayat sürerek tip 2 diyabet hastalarının yarısından fazlasında diyabeti önleyebilir veya var olan diyabet hastalığını kontrol altında tutabiliriz. Bu da ancak toplumun bilinçlendirilmesi ile mümkün olabilir.

Diyabetin başlangıç döneminde tespit edilerek tedavi edilmesi, ileriki yaşamda önemli faydalar sağlar.

Güncel bilgilerimize göre, erken dönemde iyi şeker kontrolü sağlanmış olan kişilerde uzun vadede diyabetle ilişkili göz ve böbrek problemleri, kalp krizi gibi sorunlar daha az görülmektedir. "Miras etkisi" olarak tanımlanan bu durumun bilinmesi, diyabetlilerin tedaviyi geciktirmemeleri, ihmal etmemeleri bakımından önemlidir.

Çok su içme, çok idrara çıkma gibi kan şekeri yüksekliğine ait tipik belirtilerin olabilmesi için şekerin çok yükselmesi gerekir. Halbuki, şekerin çok yükselmediği, erken dönemden itibaren dokularda diyabete ilişkin zararlar başlamaktadır. Bu nedenle kan şekerinin diyabetli olmayanlara benzer düzeylerde tutulması için sürekli çaba sarf edilmelidir. ►



Dünya Diyabet Günü

14 Kasım



Diyabet tedavisinde istediğimiz hedeflere yeterince ulaşabilmiş değiliz

Türkiye Endokrinoloji ve Metabolizma Derneği (TEMĐ) tarafından gerçekleştirilen ve 2018 yılında yayınlanan "TEMĐ Çalışması" ile, ülkemizdeki diyabet hastalarında kan şekeri, kan basıncı (tansiyon) ve kolesterol yüksekliği, obezite gibi sorunların yeterince kontrol altına alınamadığı gösterilmiştir. Bu durum sadece Türkiye'nin değil, tüm dünyanın sorunudur. IDF (International Diabetes Federation- Uluslararası Diyabet Federasyonu) 2030 yılı için aşağıdaki hedeflerin benimsenmesini önermektedir;

- Diyabetli bireylerin %80'ine tanı konulması
- Diyabetli bireylerin %80'inde şeker kontrolü sağlanması
- Diyabetli bireylerin %80'inde kan basıncı kontrolü sağlanması
- 40 yaş ve üstü diyabetli bireylerin %60'ının kolesterol ilacı kullanmasının sağlanması
- Tip 1 diyabetli bireylerin %100'ünün insüline ve kişisel kan şekeri takibi olanaklarına ulaşması

Ülkemizdeki sağlık sisteminde SGK kapsamındaki tüm bireyler insülin ve parmak ucu şeker ölçüm imkanlarına ulaşabilmektedir. Bu açıdan bakıldığında listedeki son maddenin hemen hemen sağlandığı söylenebilir. Bununla birlikte cilt altı şeker seviyesini sürekli ölçerek kayıt yapan "sürekli şeker ölçüm sistemleri"nin kullanımı tüm dünyada yaygınlaşmaktadır. Bu sistemlerle daha kapsamlı ve başarılı bir şekilde takip yapılabilmektedir. Ancak, maliyet yüksekliği nedeni ile, bu sistemlere ulaşım sağlayabilen hasta sayımız kısıtlıdır. Sosyal Güvenlik Kurumu'nun sürekli şeker ölçüm sistemlerinin teminini sağlaması, yaşamını insülin tedavisi sayesinde sürdürebilen tip 1 diyabetli hastalarımız için çok faydalı olacaktır.

Dünya Diyabet Günü 2022 Ana Tema'sı "Eğitim" dir. Bu konudaki desteğinizi çok önemsiyoruz.

International Diabetes Federation- Uluslararası Diyabet Federasyonu (IDF) Dünya Diyabet Günü aktiviteleri için her yıl bir tema belirler. Bu yıl için "Yarınları Korumak (Güvenceye Almak) İçin Eğitim" tema olarak belirlenmiştir.

Çünkü diyabette hastalık yönetiminin %90'ını öz bakım oluşturur. Yani beslenme, egzersiz, ilaç kullanımından oluşan temel tedavi kurallarının doğru bir şekilde uygulanabilmesi, eşlik eden sorunlarla baş edilebilmesi için diyabetlinin takip ve tedavide sorumluluk alması, hastalığını hekim, diyetisyen, diyabet hemşiresi ve diğer sağlık profesyonellerinin desteği ile yönetmesi gerekir. Bu da ancak eğitimle olur.

Yazılı ve görsel medya hasta eğitiminde çok değerlidir. Öte yandan basında ve sosyal medyada yer alan gerçek dışı veya abartılı haberler hastalarımız için risk oluşturmaktadır. Kronik hastalıklarda hastaların hızlı ve kolay sonuç alabilecekleri tavsiyelere itibar etmeleri söz konusu olabilir. Bu, bir sağlık sorunu ile mücadele eden ve zaman zaman bıkkınlık

yaşayan her hastada beklenebilecek bir durumdur. Ancak, özellikle sosyal medyada gerçek dışı, hiçbir tıbbi kanıta dayanmayan bazı karışımlar, meyveler, içecekler kontrolsüz bir şekilde diyabete çare gibi sunulabilmekte, bu durum hastalarda ciddi sorunlara neden olabilmektedir.

Diğer bir sorun da, obez diyabetlilerde belli koşullar altında, seçilmiş hastalara uygulanabilecek olan cerrahi girişimlerin "diyabet ameliyatı" olarak sunulmasıdır. Birçok hasta bu ameliyatları tüm diyabetli hastalarda uygulanabilecek, hastalığı yaşam boyu yok eden, hiçbir riski olmayan işlemler olarak düşünmektedir. Bu kişilerde ameliyat kararının endokrinoloji uzmanının da bulunduğu kurullar tarafından alınması, ameliyat sonrası takipte risklerin azaltılması ve gereksiz ameliyatların önlenmesi bakımından önemlidir.

Geçtiğimiz yıllarda aşılama ile ilgili önerilerimiz aşı karşıtı söylemlerin etkisi ile yeterince uygulanmamıştır. Pandemi sürecinde aşının önemi anlaşılsa da diyabetli hastalarımızın grip ve zatürre aşılarını yaptırmaları konusunda hedeflere ulaşılabilmiş değildir, hastalarımızın teşvik edilmesi için basının desteğine ihtiyacımız vardır.

Tüm bunların ötesinde standart-genel bilgilendirmelere 14 Kasım 2022 tarihine yakın günlerde, ayrıca zamana yayılarak sıklıkla yer verilmesi, diyabetli hastalarımızın bilgilendirilmesi ve bilinçlenmesi için çok değerlidir. Bu konuda konunun uzmanı olan meslektaşlarımıza öncelik verilmesi konusundaki hassasiyetinize ihtiyaç bulunmaktadır.

Derneğimiz siz değerli basın mensuplarının diyabet ve diğer endokrinolojik sorunlara ilişkin sorularına yanıt vermeye her zaman hazırdır. Çalışmalarınızda başarılar diler, saygılarımızı sunarız.

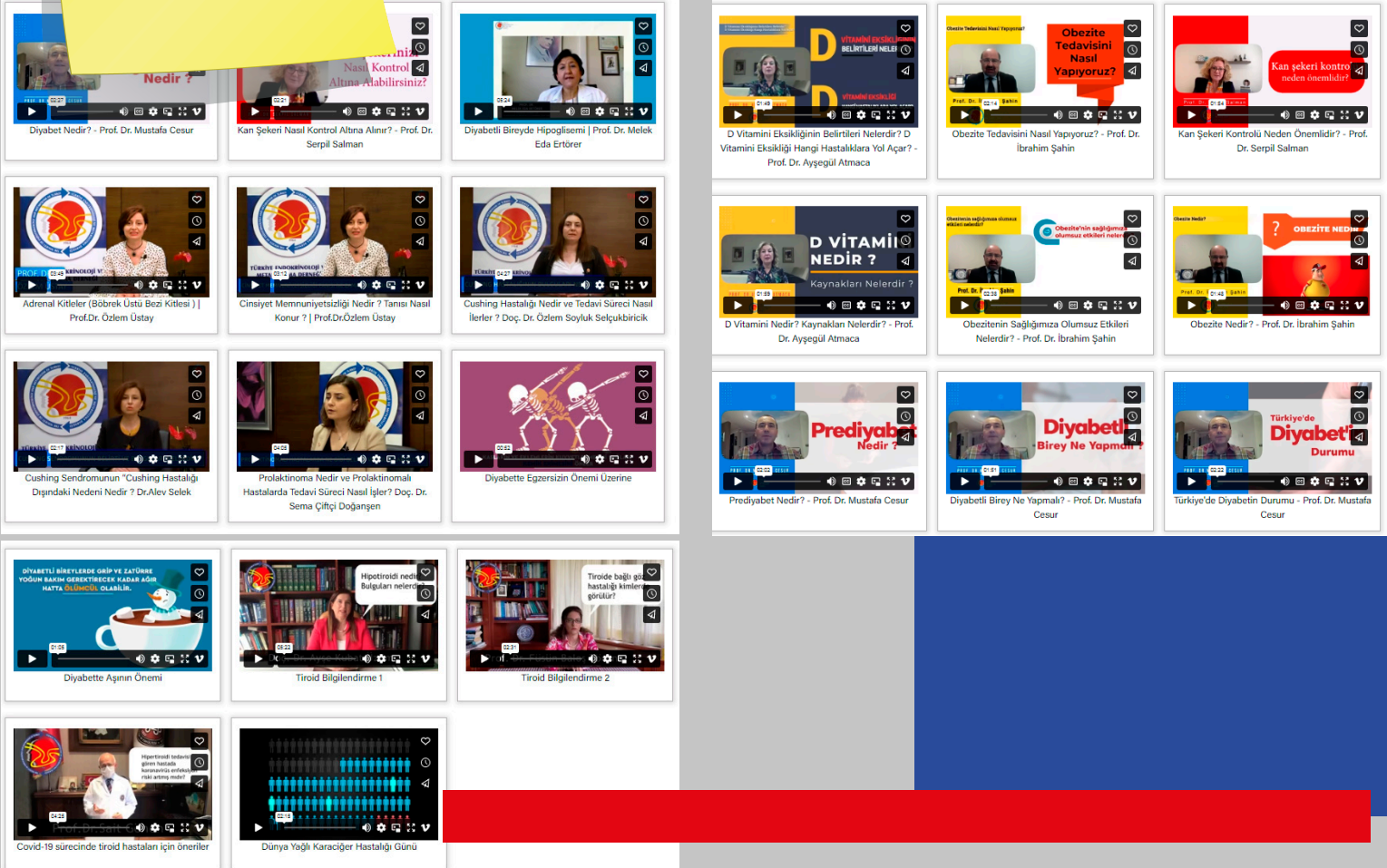
ETKİNLİKLER



Bursa Uludağ Üniversitesi Endokrinoloji ve Metabolizma Bilim Dalı olarak bu yıl 14 Kasım 2022 Dünya Diyabet gününde hastane hemşirelerinin farkındalığını artırmaya yönelik bir toplantı gerçekleştirilmiştir.

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Hastalar için bilim dalımızla ilgili kısa videolar web sayfamıza eklenmiştir. Emeli geçen meslektaşlarımıza teşekkür ederiz. Videolara ulaşmak için lütfen **tıklayınız**.



**GÜNCELLENEN
KILAVUZLARIMIZ**

Değerli Üyemiz,

“Hipofiz Hastalıkları Tanı, Tedavi ve İzlem Kılavuzu -2022” ve **“Adrenal ve Gonadal Hastalıklar Kılavuzu – 2022”** kılavuzlarımız güncellenmiş ve web sayfamızda yayınlanmaya başlamıştır.

Emeği geçen tüm üyelerimize ve çalışma grubu başkanlarımıza teşekkür ederiz.

Saygılarımızla
TEMED Yönetim Kurulu



Hipofiz Hastalıkları Tanı, Tedavi ve İzlem Kılavuzu -2022



Adrenal ve Gonadal Hastalıklar Kılavuzu – 2022

ULUSAL VE ULUSLARARASI BİLİMSEL KONGRE VE SEMPOZYUMLAR

- 26-30 Nisan 2023
59. Ulusal Diyabet, Metabolizma ve Beslenme Hastalıkları Kongresi
Nirvana Cosmopolitan Hotel, Lara, Antalya
<https://www.diyabetkongresi.org/>
- 4 – 7 Mayıs 2023
IOF-WCO-IOF-ESCEO, World Congress on Osteoporosis, Osteoarthritis and Musculoskeletal Diseases – Virtual Congress
CCIB Congress Center, Barcelona, Spain
<https://virtual.wco-iof-esceo.org/>
- 12 – 13 Mayıs 2023
44. Türkiye Endokrinoloji ve Metabolizma Hastalıkları Kongresi
The Marmara Taksim, İstanbul
<http://www.temhk.org/>
- 13 – 16 Mayıs 2023
25th European Congress of Endocrinology - ECE 2023, İstanbul
<https://www.esa-hormones.org/events-deadlines/european-congressof-endocrinology/ece-2023/>
- 15 – 18 Haziran 2023
ENDO 2023, Annual Meeting of the Endocrine Society, Chicago, IL
<https://www.endocrine.org/meetings-and-events/endo2023>
- 23 – 26 Haziran 2023
83rd ADA Scientific Sessions, San Diego, CA
<https://professional.diabetes.org/scientific-sessions>
- 2 – 6 Ekim 2023
59th Annual Meeting - European Association for the Study of the Diabetes, Hamburg, Germany
<https://www.easd.org/annual-meeting/easd-2023.html>
- 26 – 29 Ekim 2023
Mezuniyet Sonrası Eğitim Kursu - ENDOKURS 7 Crowne Plaza, Bursa
<https://www.temd.org.tr/kurslar/mezuniyet-sonrasi-egitim-kursu---endokurs-7>

ÜYELERİMİZDEN LİTERATÜR SEÇMELERİ

EFFECT OF REGULAR EXERCISE ON THE LEVELS OF SUBFATIN AND ASPRO SIN: A TRIAL WITH DIFFERENT TYPES OF EXERCISE

T Akbulut¹, V Cinar, K Ugur, M Yardim, Z K Karagoz, S Aydin

Eur Rev Med Pharmacol Sci. 2022 Apr;26(8):2683-2691. doi: 10.26355/eurrev_202204_28598. PMID: 35503613 DOI: 10.26355/eurrev_202204_28598

Objective: Subfatin (Metrn1) and asprosin are associated with metabolic diseases, such as obesity and diabetes. Exercise is among the most important regulators of health in humans and has been previously demonstrated to regulate these parameters. The present study aimed to investigate the effects of different types of regular exercises on levels of subfatin, asprosin, aspartate aminotransferase (AST), alanine aminotransferase (ALT), uric acid, and glucose.

Materials and methods: The study included 120 young and healthy males, who participated in the study voluntarily. These participants were randomly divided into four groups, such as control (C), aerobic exercise (AE), intermittent (HIIT), and resistance exercise (RE) groups. Additionally, all the groups had equal numbers of participants. First, the subjects in the exercise group were made familiar with the exercise regime for two weeks. Then, they performed regular exercises, three days a week for eight weeks. Blood samples were collected from the participants at the beginning and end of the study. Subfatin and asprosin levels were analyzed using the ELISA method. AST, ALT, uric acid, and glucose levels were analyzed using the AutoAnalyzer.

Results: No differences were observed in pretest values between the groups ($p > 0.05$). Assessment of intragroup changes demonstrated no significant changes in the control group. In the comparisons, statistically significant changes were recorded in the levels of subfatin, asprosin, and glucose in all exercise groups. Particularly, differences were observed in the levels of AST and uric acid in the AE and HIIT groups while differences in ALT levels were observed only in the AE group ($p < 0.05$).

Conclusions: In the conclusion of the study, different types of exercises caused significant changes in subfatin and asprosin levels. Thus, these results suggested that the parameters associated with metabolic diseases could be controlled with the aid of regular exercises.

EVIDENCE-BASED INFORMATION ABOUT INTERMITTENT FASTING IN DIABETES PATIENTS: USEFUL OR HARMFUL?

Mustafa Altay¹

Turk J Med Sci. 2022 Aug;52(4):873-879. doi: 10.55730/1300-0144.5386. Epub 2022 Aug 10. PMID: 36326405 DOI: 10.55730/1300-0144.5386

Background: One of the most important components of treatment for diabetic patients is diet and healthy nutrition therapy. Calorie restriction is effective and without cost increases its appeal for both patients and physicians. Unfortunately, continuous calorie restriction is a difficult method. For this reason, alternative calorie restriction methods, such as intermittent fasting (IF), have been investigated by some researchers.

Methods: IF refers to a wide range of diet programmes covering periods of eating and fasting, which vary according to the different regimens. In this article, first, some general information will enable us to understand the concept of IF; and then scientific evidence with respect to IF applications in diabetes will be discussed in detail. Thereafter our clinical experience will be summarised, finally, the author will try to answer the question "are the IF applications beneficial or harmful for diabetic patients?"

Results: Considering animal studies, epidemiological studies, pilot studies, clinical experiences and a small number of randomized controlled trials conducted so far, it seems possible to say that the beneficial effects of IF for diabetes patients are greater than potential harms. However, there are not yet enough studies with a high level of evidence to recommend IF as a routine part of the treatment in patients with diabetes.

Discussion: It is necessary to show which IF regimen is safe and effective, how often and for how long, for diabetic patients. This seems possible with well-designed randomized controlled trials focusing on long-term clinical outcomes and eliminating confounding factors. This will make the answer clearer.

DEPRESSION, ANXIETY, BODY IMAGE SCORES, AND SEXUAL DYSFUNCTION IN PATIENTS WITH POLYCYSTIC OVARY SYNDROME ACCORDING TO PHENOTYPES

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Gynecol Endocrinol. 2022 Oct;38(10):849-855. doi: 10.1080/09513590.2022.2118708. Epub 2022 Sep 11. PMID: 36093888 DOI: 10.1080/09513590.2022.2118708

Background: Polycystic ovary syndrome (PCOS) has been linked to both mental and metabolic disturbances. The purpose of this research was to investigate psychological features such as anxiety and depression, body image, sexual dysfunction, and associated factors among the PCOS phenotypes and to compare these with healthy controls.

Methods: The study involved 167 reproductive-age women with PCOS and 73 healthy controls. Standardized scales assessing depression (the Beck Depression Inventory [BDI]), depression and anxiety (the Hospital Anxiety and Depression Scale [HADS]) and the General Health Questionnaire [GHQ]), and body image scale (the Body Cathexis Scale [BCS]) were administered to all participants. Hirsutism scores, serum androgen levels, and metabolic parameters were recorded.

Results: Significantly higher BDI, HADS depression, and GHQ scores, and a more negative body image in terms of BCS scores were observed in the women with PCOS than in the healthy controls. BDI scores were significantly higher in phenotypes A, B, and D compared with the healthy controls. No significant difference was observed in BDI and HADS depression scores among the phenotypes. Significant differences were observed only between phenotype A and the control group in terms of HADS depression and GHQ scores. BCS scores were significantly higher in phenotypes A, B, and C than in the healthy controls. No significant difference was determined in Female Sexual Function Index (FSFI) scores between the PCOS phenotypes and the healthy controls. When all participants were divided into three groups based on body mass index (BMI), a statistically significant difference was observed only between the phenotype A lean group (BMI: 18.5-24.9 kg/m²) and the control group in terms of BDI, HADS depression, and BCS scores.

Conclusions: BDI, HADS depression scores, and GHQ scores were all higher in patients with PCOS compared with the healthy controls. These features were more pronounced in phenotypes A and B, including hyperandrogenism and oligo-anovulation. Physicians should be aware of the high risk of these disorders in women with PCOS.

TYPE 1 DIABETES MELLITUS FOLLOWING SARS-COV-2 MRNA VACCINATION

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Endocrine. 2022 Oct;78(1):42-46. doi: 10.1007/s12020-022-03130-8. Epub 2022 Jul 9. PMID: 35809159 PMCID: PMC9282628 DOI: 10.1007/s12020-022-03130-8

Purpose: Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) vaccines have been reported to trigger immune side effects. Type 1 diabetes as a manifestation of autoimmune/inflammatory syndrome induced by adjuvants has been reported in a limited number of cases after vaccinations. A few type 1 diabetes cases after SARS-CoV-2 vaccination have been reported. This study aims to report type 1 diabetes cases associated with the mRNA-based SARS-CoV-2 vaccination.

Methods: We report four cases of type 1 diabetes mellitus after mRNA-based SARS-CoV-2 vaccine, BNT162b2 (Pfizer-BioNTech). In the medical history, one subject had autoimmune thyroid disease. All patients had autoantibodies against glutamate decarboxylase.

Results: In the presented case series, type 1 diabetes developed a few weeks after BNT162b2 vaccination. After developing type 1 diabetes, the insulin dose requirements of all patients decreased rapidly, and the need for insulin therapy in three patients disappeared during follow-up. Acute deterioration of glucose regulation in a patient followed by BNT162b2 administration may be due to vaccine-induced autoimmune diabetes.

Conclusion: Vaccination with BNT162b2 may trigger type 1 diabetes.

THE EFFECT OF HYPERVITAMINOSIS D AND INTOXICATION ON HEMATOLOGICAL PARAMETERS

Adnan Batman¹, Rafiye Ciftçiler²

Minerva Endocrinol (Torino). 2022 Sep;47(3):279-285. doi: 10.23736/S2724-6507.21.03614-9. Epub 2021 Nov 26. PMID: 34825557 DOI: 10.23736/S2724-6507.21.03614-9

Background: This study aimed to compare the hematological parameters of patients with very high and normal 25-hydroxyvitamin-D3 (25(OH)D3) levels.

Methods: This study was designed as a retrospective cross-sectional study. The patients were divided into three groups according to their 25(OH)D3 levels: groups 1, 2 and 3 consists of patients with normal 25(OH)D3 levels (30-88 ng/mL), hypervitaminosis D (89-149 ng/mL) and vitamin D intoxication (>150 ng/mL), respectively. According to vitamin D levels, statistical analysis was performed by comparing the biochemical and hematological data between the groups.

Results: This study evaluated 120 patients (40 patients) in three equal groups. A statistically significant difference was found between the three groups in hemoglobin (P=0.03), hematocrit (P=0.01), red blood cell levels (P=0.03), leukocyte count (P<0.001), neutrophil count (P<0.001), lymphocyte count (P=0.006), mean platelet volume (P=0.04), and neutrophil/lymphocyte ratio (P=0.03). In post-hoc analysis, hemoglobin, hematocrit and RBC were significantly higher in group 1 than in group 3 (post-hoc Tukey, P<0.05). A statistically significant negative correlation was noted between 25(OH)D3 level and hemoglobin (r=-0.236), hematocrit (r=-0.230), and red blood cell (r=-0.265) levels.

Conclusions: Vitamin D intoxication has been observed to affect hemoglobin, hematocrit, and RBC levels negatively. However, more studies are needed to clarify the effects and mechanisms of high vitamin D levels on the hematopoietic system.

CAN SERUM THYROGLOBULIN LEVELS HELP TO IDENTIFY THE INVOLVED NECK COMPARTMENT OF DIFFERENTIATED THYROID CARCINOMA?

Adile Begüm Bahçecioğlu¹, Elgin Ozkan², Mine Araz², Atilla Halil Elhan³, Murat Faik Erdoğan¹

Horm Metab Res. 2022 Oct;54(10):658-663. doi: 10.1055/a-1903-1800. Epub 2022 Sep 2. PMID: 36055278 DOI: 10.1055/a-1903-1800

We aimed to evaluate the predictive ability of serum thyroglobulin (Tg) levels on the localization of the metastatic lymph node compartments in locoregional metastases of papillary thyroid cancer (PTC). This retrospective study included 143 patients who underwent neck dissections for a total of 172 for persistent/recurrent locoregional PTC. They were grouped according to the localization of lymph node metastasis (LNM): Central (C-LNM), Lateral (L-LNM), both central and lateral LNM (C+L LNM). To confirm that the Tg cutoff discriminated LNM localizations, the sample was categorized as suppressed (<0.1 mU/l) or non-suppressed (>0.1 mU/l) according to TSH and ROC analysis. Mixed-effects models were used to investigate the effect of LNM localization on Tg levels and to eliminate the confounding effects of TSH, tumor burden (defined as the number and the largest diameter of LNM), and RAI. Mean Tg levels were $1.43 \mu\text{g/l}$ for C-LNM ($n=47$), $3.7 \mu\text{g/l}$ for L-LNM ($n=99$), and $8.60 \mu\text{g/l}$ for C+L LNM ($n=26$). Independent of TSH, tumor burden and RAI, the mean Tg levels of L-LNM and C+L LNM groups were not significantly different, while that of C-LNM was significantly lower than those of L-LNM and C+L LNM. To discriminate C-LNM from L-LNM and C+L LNM in patients with TSH >0.1 mU/l, the optimal cutoff for Tg was $1.05 \mu\text{g/l}$ (sensitivity=74.7%, specificity=70.4%, PPV=87.7%). L-LNM increases serum Tg levels more than C-LNM in persistent/recurrent locoregional nodal disease of PTC. Tg above $1.05 \mu\text{g/l}$ may indicate lateral LNM. Tg may be an important marker for the localization of LNM in the neck.

ASSOCIATION OF THIOL/DISULPHIDE HOMEOSTASIS WITH BETHESDA CLASSIFICATION OF THYROID NODULES AND THYROID CANCER

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Background: Ultrasonography and fine-needle aspiration biopsy are frequently used to diagnose thyroid cancer. However, supportive data might be required in case of diagnostic difficulty. This study investigated whether there is a relationship between thiol/ disulphide homeostasis and cytological and histopathological diagnosis of thyroid nodules.

Methods: The patient group consisted of 81 individuals with euthyroid nodular (single/multiple) goiter scheduled for thyroidectomy, and the control group consisted of 28 age- and sex-matched healthy volunteers who had no thyroid nodule on ultrasonographic evaluation. All participants were selected among the admissions to the study clinic between June 2017 and June 2018, and venous blood samples were

collected. The samples of the patients were taken before surgery. Thiol and disulphide levels were analysed with the automated spectrophotometric method.

Results: The mean age of the patient group was 45.66 ± 10.45 years, and the mean age of the control group was 43.53 ± 11.49 years ($p = 0.365$). The increasing Bethesda categories were positively correlated with the disulphide level ($r = 0.281$, $p = 0.011$), disulphide/native thiol ratio ($r = 0.241$, $p = 0.030$) and disulphide/total thiol ratio ($r = 0.250$, $p = 0.024$). Disulphide/native thiol ratio and disulphide/ total thiol ratio were significantly higher in the histopathologically malignant (euthyroid nodular goiter but final pathology reported malignant) compared to histopathologically benign (euthyroid nodular goiter but final pathology reported benign) ($p = 0.012$; $p = 0.007$, respectively) and control groups ($p = 0.006$; $p = 0.004$, respectively), but no significant difference was found in these ratios between benign and control group ($p = 0.711$; $p = 0.749$, respectively).

Discussion: Oxidative stress parameters were significantly higher in thyroid cancer. A positive correlation was detected between Bethesda categories with increased risk of malignancy and the disulphide/native thiol ratio and the disulphide/total thiol ratio.

ASSESSMENT OF SUBCLINICAL CARDIOVASCULAR ALTERATIONS IN NONFUNCTIONING ADRENAL INCIDENTALOMAS

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Background: Adrenal incidentalomas have been associated with increased cardiovascular risk and have a prevalence as high as 10%. This study aims to evaluate carotid- intima media thickness (CIMT), left ventricular mass, and epicardial adipose tissue thickness in nonfunctioning adrenal incidentaloma patients and compare their results with healthy controls.

Methods: Patients who were referred to the endocrinology clinic for adrenal incidentaloma between 2014 and 2019 were assessed with 1 mg dexamethasone suppression test, 24-h urine metanephrines and normetanephrines, plasma aldosterone to renin ratio. Age and gender-matched subjects without an adrenal mass formed the control group. Left ventricular mass, epicardial adipose tissue thickness, and CIMT of both groups were measured.

Results: A total of 41 adrenal incidentaloma patients (21 female, 52.5%) and 40 healthy controls (19 female, 46.3%) were included in the study. Patients with adrenal incidentalomas had increased CIMT. No differences were observed in left ventricle mass or epicardial adipose tissue thickness. There was no correlation between CIMT and adenoma size or serum cortisol ($p = 0.2$ and $p = 0.6$, respectively). There was a statistically significant correlation between CIMT and age ($p = 0.016$, $r = 0.295$). HBA1c ($p = 0.001$) and age ($p = 0.05$) were independently associated with CIMT in regression analysis.

Discussion: Adrenal incidentaloma patients need to be monitored for cardiac dysfunction. CIMT may be used to evaluate adrenal incidentaloma patients for early cardiovascular risk.

EFFECT OF EXENATIDE THERAPY ON PLATELET FUNCTION IN TYPE 2 DIABETES MELLITUS

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Objective: The purpose of the present study was to determine the effects of exenatide treatment on platelet function in type 2 diabetes mellitus (DM) patients.

Study design: Case-control observational study.

Place and duration of study: University of Health Sciences, Diskapi Yildirim Beyazit Training and Research Hospital, Ankara from October 2016 to October 2018.

Methodology: This study included 50 patients with type 2 DM, who had started exenatide therapy; and age-gender matched 54 control subjects. The biochemical data and BMI of the patients were analysed at the time of admission and after six months of exenatide treatment.

Results: PDW (platelet distribution width) and MPV (mean platelet volume) were higher in the diabetic patient group than in the control group ($p < 0.01$ and $p = 0.036$, respectively). Significant positive correlations were determined between PDW and BMI ($p < 0.001$), FPG ($p < 0.001$), and HbA1c ($p < 0.001$). After six months of exenatide treatment, PDW ($p = 0.015$) values and platelet count ($p = 0.003$) were significantly decreased.

Conclusions: Exenatide causes a decrease in PDW value and platelet count independent of its positive effect on lipid profile, glycemic regulation, and weight loss, which contributes to explain the effect of treatment on the cardiovascular system through a different mechanism. Key Words: Exenatide, Type 2 diabetes mellitus, Platelet count, Platelet distribution width, Mean platelet volume.

OUTCOMES OF INITIAL MANAGEMENT STRATEGIES IN PATIENTS WITH AUTOIMMUNE LYMPHOCYTIC HYPOPHYSITIS: A SYSTEMATIC REVIEW AND META-ANALYSIS

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Context: Lymphocytic hypophysitis (LyHy) is characterized by inflammation of the pituitary and/or neuroinfundibulum and is uncommon. Treatment options include observation, high-dose glucocorticoids (HD-GCs) or surgery. Optimal first-line management strategy, however, remains unknown.

Objective: This work aimed to assess response to first-line treatment options (observation, HD-GCs, or surgery) of clinically relevant outcomes (symptomatic, hormonal, and radiographic improvement) among patients with LyHy.

Methods: A systematic review was conducted in 6 databases through 2020. Meta-analysis was conducted when feasible using a random-effects model.

Results: We included 33 studies reporting on 591 patients (423 women, 72%) with LyHy. Improvement/resolution of anterior pituitary dysfunction was highest when HD-GCs was first-line treatment. Surgery was associated with the greatest proportion of patients who had regression on imaging. Subgroup analysis comparing HD-GCs to observation showed the odds of anterior pituitary hormone recovery (OR 3.41; 95% CI, 1.68-6.94) or radiographic regression (OR 3.13; 95% CI, 1.54-6.36) were higher with HD-GCs, but so was the need for additional forms of treatment (OR 4.37; 95% CI, 1.70-11.22). No statistically significant difference was seen in recovery of diabetes insipidus (OR 0.9; 95% CI, 0.26-3.10). Certainty in these estimates was very low.

Conclusion: Observation and use of HD-GCs both are successful first-line management strategies in LyHy. Although use of HD-GCs was associated with increased recovery of anterior pituitary hormone deficit, it also was associated with greater likelihood of additional treatment after withdrawal. Optimal dosing and duration of HD-GCs remains unknown.

THE LATERALIZATION ACCURACY OF INFERIOR PETROSAL SINUS SAMPLING IN CUSHING'S DISEASE: EXPERIENCES OF A TERTIARY CENTER

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Background: The purpose of this study is to determine the accuracy of bilateral inferior petrosal sinus sampling (IPSS) in lateralization and to investigate variables associated with accurate IPSS lateralization prediction.

Methods: Initially, data from 55 patients who underwent IPSS in our institution were reviewed retrospectively. IPSS lateralization and pituitary magnetic resonance imaging (MRI) results of these patients were compared with postoperative follow-up and immunohistochemical data to calculate the positive predictive values (PPVs) for IPSS and MRI. Variables likely to be associated with the accurate prediction of IPSS lateralization were analyzed.

Results: Twenty-seven patients (85.2% female, mean age of 38.5 ± 13.1 years) were enrolled in the study. With IPSS, interpetrosal ratios were found to be ≥ 1.4 in 26 (96.2%) cases, and this ratio correctly predicted adenoma localization for 18 patients (PPV: 69.2%). For 16 (59.2%) patients, right lateralization was detected, while left lateralization was detected for 10 (37%) patients. Right-sided IPSS lateralization was associated with enhanced accuracy ($p = 0.026$). No masses were detected in the MRI images of 10 (37%) patients, while microadenoma of ≤ 6 mm was detected for 17 (63%) patients. MRI results (when positive) correctly identified adenoma localization for 14 of the patients with lateralization accuracy higher than that of IPSS (PPV: 82.3% vs. 69.2%).

Discussion: IPSS is a valuable procedure in detecting tumor lateralization, especially in patients with Cushing's disease who have negative pituitary MRI results. However, since lateralization has a limited reliability, the pituitary gland should be comprehensively evaluated by taking into account the MRI findings (if positive) as well as data on the side of IPSS lateralization.

CLINICAL PREDICTORS OF ECTOPIC PARATHYROID ADENOMAS: EXPERIENCE WITH 421 CONFIRMED PARATHYROID ADENOMA LOCALIZATIONS

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Purpose: This study was designed to evaluate whether patients with ectopic parathyroid adenoma (EPA) have clinical predictors by comparing them with other patients operated on for primary hyperparathyroidism (PHPT) with uniglandular parathyroid adenomas in other localizations.

Methods: The data of PHPT patients who underwent parathyroidectomy in our institution were assessed retrospectively. Abnormal gland localization was confirmed by operative and pathology reports as well as normocalcemia that lasted for at least 6 months postoperatively. The relationships of biochemical and clinical findings of patients with confirmed adenoma localizations were analyzed. In order to determine independent factors that can predict EPAs, binary logistic regression was used.

Results: Among 421 patients (83.4% female, mean age 49 ± 13.2 years) enrolled in the study, the most common adenoma localization was the lower left parathyroid gland (36.1%; $p < 0.001$). Parathyroid adenomas were more common in lower localizations compared to upper localizations and were smaller in size ($p < 0.001$ and $p = 0.004$, respectively). In univariate analysis, serum intact parathyroid hormone and calcium levels were found to be higher ($p = 0.004$ and $p = 0.002$, respectively), moderate/severe hypercalcemia was more common ($p = 0.024$), phosphorus levels were lower ($p = 0.04$), and postoperative transient hypocalcemia was more common ($p = 0.013$) in cases of EPAs than other localizations. There was no significant difference in adenoma size between EPAs and other classical localizations. In multivariate analysis, only a high serum calcium level was an independent predictor of EPAs (OR 2.017, 95% CI 1.142-3.564, $p = 0.016$). Receiver-operating characteristic curve analysis yielded an optimal cutoff value of 12.25 mg/dL for serum calcium (88% sensitivity, 63% specificity, and area under the curve: 0.861).

Conclusion: EPAs can cause a more biochemically distinct PHPT picture compared to parathyroid adenomas in classical localizations. A high calcium level at diagnosis may be a clinical predictor for EPAs and may affect the clinical approach and imaging technique choices. Due to the increased risk of transient hypocalcemia in patients with EPAs, caution should be exercised in postoperative follow-up. Furthermore, in the event of negative preoperative imaging, starting the parathyroid exploration from the lower

AGE, GH/IGF-1 LEVELS, TUMOR VOLUME, T2 HYPPOINTENSITY, AND TUMOR SUBTYPE RATHER THAN PROLIFERATION AND INVASION ARE ALL RELIABLE PREDICTORS OF BIOCHEMICAL RESPONSE TO SOMATOSTATIN ANALOGUE THERAPY IN PATIENTS WITH ACROMEGALY: A CLINICOPATHOLOGICAL STUDY

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Purpose: To determine whether biochemical responses to long-acting forms of first-generation somatostatin analogue (SSA) therapy in patients with acromegaly could be predicted from baseline and postoperative hormone concentrations, and tumor radiological and histopathological characteristics.

Methods: A total of 68 patients with acromegaly for whom postoperative SSA therapy was started were categorized according to their responses to treatment (SSA-responders vs. non-responders). The patients were compared based on their demographic characteristics, hormone levels, magnetic resonance imaging (MRI), and histopathological findings. Receiver-operating-characteristic (ROC) curves were constructed using the predictive factors that were significant in the univariate analysis to determinate the optimal cut-off values.

Results: The SSA-responders were significantly older ($p = 0.041$). Lower GH at diagnosis ($p = 0.036$), the postoperative 1st-week GH level ($p = 0.027$), baseline GH, insulin-like growth factor-1 (IGF-1) and IGF-1% upper limit of normal (ULN) ($p = 0.001$, $p = 0.006$, $p = 0.023$, respectively) were associated with biochemical response. T2-hypointensity and lower tumor volume were more common in the SSA-responders ($p = 0.018$, $p = 0.03$, respectively). Compared to sparsely granulated somatotroph tumors, densely granulated somatotroph tumors and other PitNETs causing GH excess including mammosomatotroph and mixed somatotroph and lactotroph tumors were more likely to respond to SSA therapy ($p = 0.026$, $p = 0.03$, respectively). The cut-off values generated by ROC curve analysis were GH at diagnosis of ≤ 8.8 ng/mL, GH at baseline of ≤ 2.69 ng/mL, IGF-1 at baseline ≤ 461.5 ng/mL, IGF-1% ULN at baseline $\leq 180.4\%$, and tumor volume of ≤ 1.11 cm³ (all $p < 0.05$). There were no differences between the groups in terms of tumor invasiveness, proliferative activity (mitotic count per 2 mm² and Ki-67 labeling index) and quantitative analyses of T2-weighted MRI.

Conclusion: This study underscores that advanced age, low baseline GH and IGF-1 at diagnosis, low tumor volume, densely granulated tumor subtype, and T2 hypointensity may help predict biochemical response to SSA therapy in cases of acromegaly. These variables should be assessed with utmost attention for all patients prior to SSA treatment. In cases of possible resistance to SSA therapy, therapeutic activity should be monitored more closely and other therapies should be administered immediately in the event of poor response.

DIABETES IS AN INDEPENDENT PREDICTOR OF SEVERE ACUTE PANCREATITIS

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We aimed to determine the effect of diabetes mellitus (DM) on the severity of acute pancreatitis (AP) and whether diabetes is a predictor of severe acute pancreatitis (SAP). A total of 181 patients diagnosed with a first attack of AP in our hospital were retrospectively evaluated. AP severity was evaluated and compared between diabetic and non-diabetic patients. Independent factors predicting SAP were identified with a binary logistic regression model. Of the 164 patients [108 (65.9%) women, 56 (34.1%) men] enrolled in the study, 35 patients (21.3%) had been diagnosed with DM, while 129 (78.7%) did not have DM. SAP, necrotizing pancreatitis, and local complications were observed to be more common among diabetic patients compared to non-diabetic patients (all $P < 0.001$), while the incidences of systemic complications and transient or persistent organ failure were similar between the groups. The incidences of DM and cancer were higher in the SAP group ($P < 0.001$ and $P = 0.033$, respectively). The presence of DM (OR: 3.246, 95% CI: 1.278-8.244, $P = 0.013$), high (≥ 3) Ranson score (OR: 3.529, 95% CI: 1.342-9.280, $P = 0.011$), and high maximum C-reactive protein level (OR: 1.005, 95% CI: 1.001-1.010, $P = 0.046$) were independent risk factors predicting SAP. DM is both a risk factor for SAP and an independent predictor of SAP. Evaluation of the presence of DM at the time of diagnosis can help predict SAP in a considerably early phase.

ARE DISEASE-RELATED SYMPTOMS IMPORTANT TO PREDICTING DEVELOPING DIABETES FROM PREDIABETES?

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Background: There are not many studies conducted to detect and recognize the symptoms during the prediabetes period. In our study, we aimed to determine the symptoms that can be seen in prediabetes and diabetes and their prevalence and to determine the similarities and differences between the two groups.

Methods: Individuals who were diagnosed with prediabetes or diabetes, over the age of 18, literate, and accepted to collaborate were included in our study. The "Diabetes Symptoms Checklist Scale" was used by interviewing 321 participants, 161 prediabetic and 160 diabetic, face-to-face.

Results: It has been found that the most common symptom in both the prediabetes and the diabetes group is "fatigue" (88.2% prediabetes, 89.4% diabetes). The symptoms seen in the dimensions of neurology and hyperglycemia are more common in individuals with diabetes than in individuals with prediabetes [neurology score: 1.85 ± 0.84 vs. 1.66 ± 0.64 ($p = 0.02$), respectively; hyperglycemia score: 2.39 ± 0.94 vs. 2.08 ± 0.83 ($p = 0.002$), respectively]. It was observed that

the symptom burden increased in all subdimensions with the long duration of illness, being a female, not working, having a family history, and not doing exercise, and high fasting blood glucose and high HbA1c values. The level of education, family history, accompanying hyperlipidemia, neurology, and hyperglycemia symptoms are associated with diabetes; and it has been determined that cardiology symptoms are associated with prediabetes.

Discussion: Especially; during the follow-up of patients with prediabetes who have a low education level and diabetic family history and concomitant hyperlipidemia, there may be an increase in neurological and hyperglycemic symptoms at the point of development of type 2 diabetes. In this respect, we recommend that these factors, which we found to be predictive of diabetes compared to prediabetes, should be questioned more carefully during patient visits.

EVALUATION OF ENDOCRINOLOGICAL INVOLVEMENT AND METABOLIC STATUS IN PATIENTS WITH GAUCHER DISEASE TYPE 1 AND FABRY DISEASE UNDER ENZYME REPLACEMENT THERAPY

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Objectives: Gaucher disease type 1 (GD1) and Fabry disease (FD) are the two most common lysosomal storage diseases. For over three decades, effective enzyme replacement therapies (ERTs) have changed the fate of patients and offered a longer chance of survival and improve their quality of life.

Methods: The clinical and molecular findings, endocrinological features and metabolic status of 26 patients (16 with FD, and 10 with GD1) were evaluated. The results were compared to age- and gender-matched healthy individuals.

Results: Patients with GD1 and FD were followed for 7.2 ± 4.7 and 6.4 ± 4.3 years, respectively. Calcium and magnesium levels in patients with GD1 were lower than in controls ($p=0.01$; $p=0.002$). Osteoporosis was detected in 20% ($n=2$) of GD1 patients and 12.5% ($n=2$) of FD patients. The HbA1c value of GD1 patients was significantly lower than both in control and Fabry patients ($p=0.004$; and $p=0.007$, respectively). There was a negative correlation between LysoGb3 and female gender ($p=0.04$; $r=-0.49$), but no correlation was found with any other biochemical parameters. There was a negative correlation between the LysoGb1 level and the neutrophil ($p=0.03$; $r=-0.711$) and thrombocyte levels ($p=0.02$; $r=-0.767$), and a positive correlation with ferritin levels ($p<0.001$; $r=0.867$).

Conclusion: Long time effective ERT seems to have beneficial effects on metabolic and hormonal status as well as primary target organs in both FD and GD1 patients.

COMPARISON BETWEEN SOMATOSTATIN ANALOG INJECTIONS

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Objective: Long-acting depot formulations of somatostatin analogs, i.e., octreotide and lanreotide, are the first-line medical therapies for patients with acromegaly to whom surgery/radiotherapy cannot be performed or who have inadequate response. In this study, we aimed to evaluate the short-term local and systemic adverse reactions developed after the somatostatin analogs injections in the patients with acromegaly, in order to compare the side effects of somatostatin analogs injections.

Methods: Patients diagnosed with acromegaly who were referred to our endocrinology clinic for monthly somatostatin analogs injections were questioned. Wong-Baker Faces Pain Rating Scale was used to evaluate the injection-site pain at the time of injection. The existence of leg pain, nausea, diarrhea, and abdominal pain following the previous injection was also investigated during the next injection.

Results: A total of 49 patients were included in the study. The statistical difference could not be shown between the injection-site pain, anorexia, and leg pain frequencies of the groups, while the frequency of gastrointestinal disturbances, i.e., diarrhea and abdominal pain, was significantly lower in the octreotide group ($p < 0.001$ and $p = 0.015$, respectively).

Conclusions: This is the first prospective study that compared the severity of the injection-site pain by using a scoring scale, following the long-acting somatostatin analogs injections. We have shown that there was no significant association of the injection-site pain severity with the somatostatin analogs regimen nor the dose differences within each somatostatin analogs treatment.

INTEGRATING TRANSWOMEN AND FEMALE ATHLETES WITH DIFFERENCES OF SEX DEVELOPMENT (DSD) INTO ELITE COMPETITION: THE FIMS 2021 CONSENSUS STATEMENT

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Sport is historically designated by the binary categorization of male and female that conflicts with modern society. Sport's governing bodies should consider reviewing rules determining the eligibility of athletes in the female category as there may be lasting advantages of previously high testosterone concentrations for transwomen athletes and currently high testosterone concentrations in differences in sex development (DSD) athletes. The use of serum testosterone concentrations to regulate the inclusion of such athletes into the elite female category is currently the objective biomarker that is supported by most available scientific literature, but it has limitations due to the lack of sports performance data before, during or after testosterone suppression. Innovative research studies are needed to identify other biomarkers of testosterone sensitivity/responsiveness, including molecular tools to determine the functional status of androgen receptors. The scientific community also needs to conduct longitudinal studies with specific control groups to generate the biological and sports performance data for individual sports to inform the fair inclusion or exclusion of these athletes. Eligibility of each athlete to a sport-specific policy needs to be based on peer-reviewed scientific evidence made available to policymakers from all scientific communities. However, even the most evidence-based regulations are unlikely to eliminate all differences in performance between cisgender women with and without DSD and transwomen athletes. Any remaining advantage held by transwomen or DSD women could be considered as part of the athlete's unique makeup.

FATTY ACID-BINDING PROTEIN-4 AS A BIOMARKER PREDICTING ACROMEGALY-ASSOCIATED DIABETES MELLITUS

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Background: The known pathogenesis of diabetes mellitus (DM) in acromegaly is mainly based on growth hormone (GH) and insulin-like growth factor-1 (IGF-1) excess. Fatty acid-binding protein 4 (FABP-4), a novel adipokine, is found to induce insulin resistance and type 2 DM. We aimed to investigate the possible effect of FABP-4 on glucose metabolism in patients with acromegaly.

Methods: This case-control study included 28 patients newly diagnosed with acromegaly and 57 healthy volunteers. The patients with acromegaly were classified according to their glycemic status as with DM, prediabetes, and normal glucose tolerance. Anthropometric measurements, laboratory test results, and FABP-4 levels of the subjects were evaluated.

Results: Although no difference was observed in FABP-4 levels between acromegaly and control groups, the FABP-4 level was higher in the patients with acromegaly having DM compared to the patients with acromegaly having prediabetes and NGT, and the control group ($p = 0.004$, $p = 0.001$, $p = 0.004$, respectively). Logistic regression analysis suggested that the FABP-4 is an independent predictor of DM in acromegaly ($\beta = 7.382$, OR = 38.96, 95% CI: 1.52-5.76, $p = 0.018$).

Discussion: The FABP-4 may be a helpful predictor of acromegaly-associated DM.

ANTIOXIDANT EFFECT OF THIOREDOXIN AND VITAMIN D3 IN PERITONEAL DIALYSIS PATIENTS

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Background: Among the chronic diseases, chronic kidney failure is one of diseases that have the most difficulty in coping with oxidative stress due to the deterioration of the antioxidant system balance in the body. Beyond being a vitamin, 1 α ,25-dihydroxycholecalciferol (vitamin D3) is a molecule that positively or negatively affects many enzymes which are in protein structures. Thioredoxin (TRX), which has an important role in the antioxidant system, is one of these proteins. By conducting this study, we wanted to emphasize the role of vitamin D3 in reducing the oxidative stress load on patients undergoing peritoneal dialysis (PD) via serum TRX level measurement.

Methods: In this study, we evaluated the medical treatments of 69 PD patients who were followed up routinely. The patients were divided into 2 groups according to whether they used vitamin D3 or not. 49 of our patients were using vitamin D3. While requesting routine laboratory tests, we reserved a separate serum sample to measure serum TRX levels by double-antibody sandwich enzyme-linked immunosorbent assay for all patients.

Results: Only one parameter has a significant statistical relationship with serum TRX level and the treatment protocol. The serum TRX level was significantly higher (211,62 U/l \pm 314,46) in the group receiving vitamin D3 compared to the group which is not using Vitamin D3 (101,63 U/l \pm 215,03) ($p < 0,006$).

Conclusion: This study highlights the importance of appropriate dose of vitamin D3 replacement especially in PD patients who are under intense oxidative stress compared to healthy individuals.

BASAL BLOOD CONCENTRATIONS OF SOME OREXIGENIC AND ANOREXIGENIC HORMONES IN OBESE AND NONOBESE INDIVIDUALS ACCORDING TO BLOOD GROUPS

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Objective: Obesity is a serious public health problem associated with excessive food intake. Regulation of food intake in highly organized organisms is under the control of a large number of orexigenic and anorexigenic molecules. Therefore, the main purpose of this study has been to determine the relationship between obesity and some of the circulating orexigenic and anorexigenic peptides that have a role in appetite control and to determine whether the concentrations of these molecules differ according to blood groups.

Patients and methods: The study included 400 individuals of whom 100 were obese women, 100 obese men, 100 healthy men and 100 healthy women. Obese women and men were divided into 4 groups, according to their blood groups. In the control group, healthy women and healthy men were similarly divided into 4 blood groups. Each blood group within the groups, therefore, had 25 participants.

Results: When leptin, nesfatin-1, obestatin and neuropeptide-Y, ghrelin and galanin levels of the control group and obese participants were compared, regardless of blood groups, leptin, nesfatin-1, obestatin and neuropeptide-Y were significantly higher, whereas only the ghrelin levels were significantly lower in obese patients. When the amounts of these hormones were measured according to gender, the situation was similar. When leptin, nesfatin-1, obestatin and neuropeptide-Y values of the control and obese participants' blood groups were compared with each other; these hormones were high in all blood groups; however, leptin levels in A blood group, nesfatin-1 levels in AB and O blood group, obestatin levels in AB blood group, neuropeptide-Y levels in A, B, AB blood groups were significantly higher. When the ghrelin levels of the blood groups in the control group and obese participants were compared, it was only significantly lower in the AB blood group. The ghrelin levels in the other blood groups of the obese individuals were again low, but not significantly so. When the distribution of hormones according to gender was evaluated, a situation parallel to the above results was recorded.

Conclusions: Leptin, nesfatin-1, obestatin and neuropeptide-Y and galanin levels of obese individuals were significantly higher than the control values, whereas the ghrelin values were significantly lower regardless of blood groups. Also, these hormones in blood partly varied with ABO blood groups. These different concentrations of hormones in ABO blood groups might be related with stimulation or suppression of appetite in human. However, further studies in other ethnic groups are needed to confirm these results.

MOLECULAR COMMUNICATION BETWEEN APELIN-13, APELIN-36, ELABELA, AND NITRIC OXIDE IN GESTATIONAL DIABETES MELLITUS

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Objective: Gestational diabetes mellitus (GDM) is a type of diabetes that affects from 3.8% to 6.9% of pregnancies worldwide, causing significant mortality and unfavorable obstetric outcomes, such as delivery trauma and macrosomia risk. The fundamental processes of this metabolic disorder that first appeared during pregnancy are still unknown. Tissue hormones, particularly adipokines, have aided in understanding the pathophysiology of numerous disorders in recent years. This study aims to determine if Apelin-13 (APLN-13), Apelin-36 (APLN-36), Elabela (ELA), and nitric oxide (NO) molecules have all a part in the pathophysiology of GDM.

Patients and methods: The study included 30 pregnant control women and 30 pregnant women who had been diagnosed with GDM in the second trimester and whose body mass index and age were compatible with each other. Blood samples were collected from 60 participants during the second trimester (30 control pregnant women and 30 GDM pregnant women) and postpartum (17 controls vs. 14 GDM). In these blood samples, the amounts of APLN-13, APLN-36, ELA, and NO were studied using the ELISA method. In addition, the participants' glucose, lipid profiles, and other parameters were obtained from the hospital record files. At postpartum, 29 pregnant women (13 control and 16 pregnant women with GDM) dropped out of the study without explanation.

Results: In the second trimester and postpartum plasma of mothers with GDM, APLN-13, APLN-36, NO, and ELA molecules were found to be significantly higher ($p < 0.05$), compared to those of the control mothers, while APLN-13, APLN-36, NO values were significantly lower ($p < 0.05$). While APLN-13, APLN-36, NO amounts in mothers with GDM were positively correlated with glucose amounts, they were negatively correlated with ELA amounts. Similarly, the triglyceride amounts in mothers with GDM were positively correlated with APLN-13, APLN-36 and NO, while they were negatively correlated with the ELA amounts. Due to gestational diabetes, APLN-13, APLN-36, NO, glucose, and triglyceride increased, and ELA decreased.

Conclusions: It is predicted that the glucose increase in GDM is because Apelins reduce glucose transport to erythrocytes by inhibiting the sodium-dependent glucose transporter (SGLT) and that the increase in triglyceride and NO may be associated with high glucose levels in GDM. As a result, we believe that the above-mentioned chemicals may cause GDM Pathology by triggering one another.

CAN THE SYSTEMIC IMMUNE-INFLAMMATION INDEX BE USED AS A NOVEL DIAGNOSTIC TOOL IN THE DIAGNOSIS OF SUBACUTE THYROIDITIS?

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Aim: To evaluate systemic inflammatory parameters derived from hematological parameters in the diagnosis and prognosis of subacute thyroiditis (SAT).

Methods: Demographic and laboratory data of 170 patients with SAT and 91 healthy control subjects were analysed retrospectively. The authors compared inflammatory parameters and thyroid function tests between SAT and control groups.

Results: The erythrocyte sedimentation rate, neutrophil-to-lymphocyte ratio, platelet-to-lymphocyte ratio and systemic immune-inflammatory index (SII) were significantly higher in patients with SAT ($p < 0.001$). There was a significant positive correlation between the SII and erythrocyte sedimentation rate ($r: 0.448$; $p < 0.001$), CRP ($r: 0.449$; $p < 0.01$), neutrophil-to-lymphocyte ratio ($r: 0.861$; $p < 0.001$) and platelet-to-lymphocyte ratio ($r: 0.782$, $p < 0.001$). The thyroid stimulating hormone levels were higher in patients with recurrence when compared with those without recurrence ($p = 0.007$).

Conclusions: As a practical biomarker, SII was significantly higher in patients with SAT compared with the control group. SII may be a new diagnostic tool for SAT.

Keywords: erythrocyte sedimentation rate; neutrophil-to-lymphocyte ratio; recurrence; subacute thyroiditis; systemic immune-inflammatory index; ultrasound.

COMPARISON OF THE EFFECT OF LIRAGLUTIDE AND METFORMIN THERAPY ON THE DISEASE REGULATION AND WEIGHT LOSS IN OBESE PATIENTS WITH TYPE 2 DIABETES MELLITUS

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Objective: Obesity and Type 2 diabetes mellitus are growing health problems all over the world. The aim of this study is the comparison of 3 mg liraglutide and metformin combination, metformin monotherapy on the blood glucose regulation, weight loss and lipid panel in the patients with Type 2 diabetes mellitus whose BMI is ≥ 30 kg/m².

Patients and methods: 276 patients included in the study were divided into two groups (1:1); liraglutide (3 mg) + metformin combination (L+M) and metformin monotherapy (M) (2x1,000 mg) (exercise and diet were regulated in both groups). Patients' body composition measurements were performed and fasting blood glucose, postprandial blood glucose, HbA1c, triglyceride, total cholesterol, LDL, HDL levels were measured by TANITA device prior to the therapy and in the week 12 of the therapy.

Results: The average age of 276 patients included in the study was 49.70 ± 7.93 years. A statistically significant decrease was noted in weight, BMI, fasting blood glucose, postprandial blood

glucose, HbA1c values of both groups at the end of the third month. 11.3 kg of weight was lost on average in L+M group (-12.3%); 4.5 kg of weight was lost in the monotherapy group (-4.9%). A decrease of 14.3% was seen in the body fat mass, 2.1% in the muscle mass in L+M group and a decrease of 4.4% in the body fat mass and 6.1% in the muscle mass in the monotherapy group. The decrease in the body fat was higher at a statistically significant level in L+M group and the decrease in the muscle mass was higher in the monotherapy group. HbA1c decreased by 17.9% in L+M group (-1.49 ± 0.46 , Cohen's $d=2.68$), 5.3% in the monotherapy group (-0.37 ± 0.26 , Cohen's $d=0.90$). The decrease in TG, total cholesterol, LDL was higher at a statistically significant level in L+M group. The increase in HDL level was higher in the monotherapy group (L+M=22.7%, M=35.4%). A weight loss that was over 10% occurred in 4.3% of the patients in the monotherapy group and 68.1% of the combined therapy group at the end of 12 weeks (95% C.I. OR=19.49-121.65).

Conclusions: The effect of the combination of liraglutide 3 mg and metformin on blood glucose regulation, weight loss (fat loss, muscle conservation) was found to be superior to the metformin monotherapy in the obese patients with Type 2 diabetes mellitus according to the early period results.

EFFICACY OF CABERGOLINE ADD-ON THERAPY IN PATIENTS WITH ACROMEGALY RESISTANCE TO SOMATOSTATIN ANALOGS TREATMENT AND THE REVIEW OF LITERATURE

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Objective: It is reported that adding cabergoline to somatostatin analog (SSA) normalizes IGF-1 levels approximately in one-third of patients with acromegaly. We investigated the effect of combination therapy and potential predictors of response in patients with acromegaly who do not respond to SSA therapy alone.

Methods: Fifty acromegaly patients (M/F 23/27, mean age 50.88 ± 12.34 years) were divided into two groups as the active and control groups in this connection. Before and after treatment, we not only evaluated serum GH and IGF-1 levels and tumor size but also analyzed the factors relevant to the effect of the combined therapy.

Results: Adding cabergoline to SSA treatment led to IGF-1 normalization in 42% (21/50) of patients. Mean GH levels decreased from 2.64 ± 1.79 to 1.34 ± 0.99 ng/mL ($p < .0001$) and IGF-1 levels decreased from 432.92 ± 155.61 to 292.52 ± 126.15 ng/mL ($p < .0001$). GH and IGF-1 reduction in percent (%) were significantly higher in the controlled group (63% to 40%, $p = 0.023$ and 45% to 19%, $p = 0.0001$). Moreover, tumor size decrease was significantly higher in controlled group (-3.6 cm to -1.66 cm, $p = 0.005$).

Conclusion: According to the results of our study, the addition of cabergoline to SSA normalized IGF-1 levels in a considerable amount of acromegaly patients with a moderately elevated IGF-1 level, regardless of serum PRL levels. Besides, cabergoline treatment was also influential in patients with higher IGF-1 levels despite a lower remission rate.

CHARACTERIZATION OF GUT MICROBIOTA IN POLYCYSTIC OVARY SYNDROME: FINDINGS FROM A LEAN POPULATION

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Background: Limited available animal and human data suggest an association between dysbiosis of gut microbiota and PCOS. We aimed to determine whether gut microbiota in lean women with PCOS shows any alterations compared to healthy women.

Materials and methods: Twenty-four lean patients with PCOS phenotype A according to the Rotterdam 2003 diagnostic criteria and 22 BMI-matched healthy women were included in this study. Anthropometric, hormonal and biochemical measurements were carried out in all participants. 16S rRNA gene V3-V4 region amplicon sequencing was performed on stool samples. Preprocessing of the raw data was performed using QIIME, and both QIIME and R packages were used for microbiome analysis.

Results: Bacterial richness and diversity did not show a significant difference between patients and controls. Beta diversity was similar between the groups. However, Erysipelotrichaceae, Proteobacteria, Gammaproteobacteria, Enterobacteriaceae, Planococcaceae, Gemmules and Bacillales were significantly abundant in PCOS group according to LEfSe analysis. Clostridium cluster XVII showed increased abundance in patient group, while Clostridium sensu stricto and Roseburia were decreased compared to controls. Random forest prediction analysis revealed Clostridium cluster XIVb as the most discriminative feature of patient group and Roseburia for healthy controls. Testosterone and androstenedione were negatively correlated with alpha and phylogenetic diversity.

Conclusions: Our results suggest that gut microbiome of lean PCOS patients with full phenotype shows compositional alterations with similar bacterial richness and diversity compared to controls and that hyperandrogenism is associated with dysbiosis.

DEVELOPMENT OF A SERS BASED CANCER DIAGNOSIS APPROACH EMPLOYING CRYOSECTIONED THYROID TISSUE SAMPLES ON PDMS

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An efficient SERS based novel analytical approach named Cryosectioned-PDMS was developed systematically and evaluated applying on 64 thyroid biopsy samples. To utilize thyroid biopsy samples, a 20- μ l volume of h-AgNPs suspension was dropped on a 5- μ m thick cryosectioned biopsy specimen placed on the PDMS coated glass slide. The SERS spectra from a 10 \times 10 points array acquired by mapping 22.5 μ m \times 22.5 μ m sized area from suspended dried droplets placed on the tissue surface. The probability of correctly predicted performance for diagnosis of malignant, benign and healthy tissues was resulted in the accuracy of 100 % for the spectral bands at 667, 724, 920, 960, 1052, 1096, 1315 and 1457 cm^{-1} using PCA-fed LDA machine learning. The Cryosectioned-PDMS biophotonic approach with PCA-LDA predictive model demonstrated that the vibrational signatures can accurately recognize the fingerprint of cancer pathology from a healthy one with a simple and fast sample preparation methodology.

MEDITERRANEAN DIET AND OBESITY-RELATED DISORDERS: WHAT IS THE EVIDENCE?

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Purpose of review: Obesity is a chronic disease, a major public health problem due to its association with non-communicable diseases and all-cause mortality. Indeed, people with obesity are at increased risk for a variety of obesity-related disorders including hypertension, dyslipidemia, type 2 diabetes mellitus, cardiovascular disease, and several cancers. Many popular diets with very different macronutrient composition, including the Mediterranean diet (MD), have been used, proposed, and studied for prevention and management of obesity. In particular, MD has been the subject of countless studies over the years and now boasts a large body of scientific literature. In this review, we aimed to update current knowledge by summarizing the most recent evidence on the effect of MD on obesity and obesity-related disorders.

Recent findings: The negative effects of obesity are partly reversed by substantial weight loss that can be achieved with MD, especially when low-calorie and in combination with adequate physical activity. In addition, the composition of MD has been correlated with an excellent effect on reducing dyslipidemia. It also positively modulates the gut microbiota and immune system, significantly decreasing inflammatory mediators, a common ground for many obesity-related disorders.

People with obesity are at increased risk for a variety of medical disorders including hypertension, dyslipidemia, type 2 diabetes mellitus, and cardiovascular disease. Therefore, there is an inevitable need for measures to manage obesity and its related disorders. At this point, MD has been proposed as a valuable nutritional intervention. It is characterized by a high consumption of vegetables, fruit, nuts, cereals, whole grains, and extra virgin olive oil, as well as a moderate consumption of fish and poultry, and a limited intake of sweets, red meat, and dairy products. MD proves to be the healthiest dietary pattern available to tackle obesity and prevent several non-communicable diseases, including cardiovascular disease and type 2 diabetes.

THICKNESSES OF THE RETINAL LAYERS IN PATIENTS WITH GRAVES' DISEASE WITH OR WITHOUT ORBITOPATHY

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Purpose: Graves' orbitopathy (GO) is an inflammatory process that may involve the ocular surface, orbital fat, extraocular muscles, and optic nerves in patients with Graves' disease (GD). We aimed to compare thicknesses of retinal layers in patients with GD with and without GO.

Methods: One hundred seven patients with GD [23 with GO (Group 1), 84 without GO (Group 2)] and eighteen volunteers (Group 3) were enrolled. The spectral-domain optical coherence tomography (SD-OCT) was used for ophthalmologic evaluation. Seven retinal layers including retinal nerve fibre layer (RNFL), ganglion cell layer (GCL), inner plexiform layer (IPL), inner nuclear layer (INL), outer plexiform layer (OPL), outer nuclear layer (ONL), retinal pigment epithelium (RPE) were assessed. The thicknesses of layers were compared in groups.

Results: The median GCL thickness values in groups 1, 2, and 3 were 14 μ m, 15 μ m, and 17.5 μ m, respectively ($p = 0.02$). The median IPL thickness was 20 μ m in group 1, 21 μ m in group 2, and 22 μ m in group 3 ($p = 0.038$). The median RPE thickness values in groups 1, 2, and 3 were 16 μ m, 17 μ m, and 18.5 μ m, respectively ($p = 0.001$). GCL in group 1 was thinner than in group 3 ($p = 0.02$), while similar in groups 2 and 3 ($p = 0.06$). IPL in group 1 was thinner than in group 3 ($p = 0.035$), while similar in groups 2 and 3 ($p = 0.13$). RPE in groups 1 and 2 was thinner than in group 3 ($p = 0.009$, $p = 0.001$, respectively), while it was similar in groups 1 and 2 ($p = 0.93$). RNFL, INL, OPL, ONL were similar in all three ($p > 0.05$ for each).

Conclusion: Ganglion cell layer and IPL were thinner in patients with GO than in healthy controls, while both were similar in patients without GO and healthy controls. RPE was thinner in all Graves patients than in healthy controls. Early detection of changes in retinal layers of GD may guide the physician to prevent significant vision problems.

EXPERIMENTAL MODEL OF UNPREDICTABLE MATERNAL STRESS AND DIABETES RİİK OF OFFSPRING: AN IMMUNOHISTOCHEMICAL STUDY

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The effect of stress on the occurrence of diabetes mellitus (DM) is commonly reported in recent studies. Maternal stress may have a negative effect on the later life of offspring. However, most studies only investigated long-term intrauterine stress on behavioral, emotional, psychological, and immunological disorders of offspring. The relationship between maternal stress and DM occurrence in the later life period of offspring is not known. This rat model study aimed to evaluate the susceptibility of offspring to DM after exposure to intrauterine stress. The purpose of this study is to examine serum glucose levels of mothers and offspring exposed to maternal stress and to evaluate pancreatic tissues pathologically and immunohistochemically. Twelve, Wistar Albino female rats were equally divided into two groups: controls and maternal stress groups. Normal routine conditions were applied to the control group without any stress. The pregnant rats in the maternal stress group were exposed to chronic unpredictable stressors throughout the 21-day gestation. One female and one male offspring and mothers from each term delivery were randomly selected and euthanatized at the 35th day. During the necropsy, blood and pancreatic tissue samples were collected from both mothers and pups. High serum glucose levels from mothers and offspring in the maternal stress group and the control group were compared. Additionally, histopathological examinations assessed the increased cell degeneration in mother rats and offspring. Immunohistochemical examinations revealed decreased insulin, amylin, and insulin receptor expressions and slightly increased glucagon expression in Langerhans islet cells in the maternal stress group. These results indicated that maternal stress may be a predisposing factor for DM in both mothers and offspring in their later life periods.

THE VISCERAL ADIPOSITY INDEX, LIPID ACCUMULATION PRODUCT, AND PLASMA ATHEROGENIC INDEX ARE ASSOCIATED WITH SUBCLINICAL ATHEROSCLEROSIS IN PATIENTS WITH NEWLY DIAGNOSED ACROMEGALY

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Background: Acromegaly is a rare chronic endocrine disorder, the active form of which is associated with an increased risk of cardiovascular and metabolic disease. Therefore, early diagnosis and treatment of cardiovascular diseases in acromegaly patients are important in terms of morbidity and mortality. The aim of this study was to determine whether the visceral adiposity index (VAI), lipid accumulation product (LAP), and plasma atherogenic index (PAI) are early cardiovascular risk markers in patients with active acromegaly.

Methods: The study included 45 patients newly diagnosed with acromegaly and 45 age-sex matched healthy control subjects. The VAI, LAP, and PAI values were calculated, and carotid artery intima media thickness (CMT) was measured in both the patients and control groups.

Results: The PAI, VAI, LAP, and CMT values were significantly higher in patients with acromegaly compared with the control subjects ($p < 0.004$, $p < 0.027$, $p < 0.012$, and $p < 0.001$, respectively). In the patient group, a significant positive correlation was found between the growth hormone (GH) and insulin-like growth factor I (IGF-I) levels, and between the VAI, LAP and PAI values. A significant positive correlation was determined between CMT and LAP values in the patient group.

Discussion: CMT is a noninvasive method used to show early atherosclerosis. However, it is operator dependent. Therefore, VAI, LAP and PAI can be used as noninvasive, simple measurement methods to evaluate early atherosclerosis in patients with acromegaly.

CHANGES IN THE PERIPAPILLARY AND SUBFOVEAL CHOROIDAL VASCULARITY INDEX AFTER TRANSSPHEROIDAL SURGERY FOR PITUITARY MACROADENOMA

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Purpose: To investigate the changes in peripapillary and subfoveal choroidal vascular indexes (CVI) before and after pituitary macroadenoma surgery by using a binarization method.

Method: In this cross-sectional study, we examined 17 eyes in 9 patients with pituitary macroadenomas who had undergone transsphenoidal pituitary surgery due to chiasmal compression. We also compiled data from 17 of 17 healthy subjects. ImageJ 1.51 software processing (National Institutes of Health, Bethesda, Maryland, USA) was used for binarization of optical coherence tomography scans. The CVI was computed as the ratio of luminal area to total choroidal areal. The CVI, OCT and VF parameters were analyzed in One-Way Repeated Measures ANOVA to determine significant changes in measurements during the postoperative course.

Results: The mean peripapillary inferior and temporal quadrant CVIs were significantly lower in the eyes of patients with pituitary macroadenoma compared to controls (46.0 ± 0.03 versus 42.8 ± 0.04 , $p = 0.02$; 45.8 ± 0.03 versus 42.3 ± 0.04 , $p = 0.02$). In repeated measure analysis, there was a significant effect of transsphenoidal microscobic pituitary surgery on peripapillary inferior quadrant CVI and BCVA, $F(1.3, 21.5) = 6.62$, $p = 0.01$ and $F(1.8, 29.7) = 7.8$, $p < 0.005$, respectively.

Conclusion: This study suggests that PMa with chiasmal compression may lead to significant changes in the peripapillary CVI. Pituitary surgery had a favorable significant effect on peripapillary choroidal vascular network and BCVA. Furthermore, optical coherence tomography is a helpful technique for quantifying the alterations of peripapillary CVI during the preoperative and postoperative course.

INVESTIGATION OF FETUIN-A PATHWAY IN DIABETES MELLITUS FORMATION IN RATS EXPOSED TO ELF MAGNETIC FIELDS

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The presence of technological devices in our lives has increased exposure to environmental electromagnetic fields. As a result of this, especially Cancer and Diabetes are increasing. Rats were divided into 3 groups with 12 rats in each group. The 1st experimental group (n = 12) was exposed to a 50 Hz ELF magnetic field of 0.4 mT for 6 hours a day for 5 days, the 2nd experimental group (n = 12) was exposed for 10 days, and the control group (n = 12) was never exposed to a magnetic field. After completing the applications, blood collection from the rats was performed under appropriate conditions, measurements were made in the laboratory, and statistical analysis was performed between the groups. There was no significant difference between the groups in the results of transaminases and lipid profiles and C-Peptide. There was no significant difference in insulin, urea, creatinine, Na, K, Ca, and uric acid parameters between the groups. However, there was a significant increase in glucose, HbA1c, and HbA1 IFCC values between the control group and the experimental groups ($p < .001$). There was a significant increase in the level of Fetuin-A between the control group and the experimental groups ($p < .05$). There was an increase in the Fetuin-A, Glucose, HbA1c, and HbA1c IFCC values in both of the experimental groups compared to the control group. We believe that an increase in these values may cause Type 3 diabetes.

EFFECT OF INSULIN THERAPY ON OCULAR BIOMETRIC PARAMETERS IN DIABETIC PATIENTS

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J Ocul Pharmacol Ther. 2020 Mar;36(2):102-108. doi: 10.1089/jop.2019.0070. Epub 2019 Oct 23. PMID: 31644372 DOI: 10.1089/jop.2019.0070

Purpose: To evaluate effects of insulin on ocular parameters in patients with type 2 diabetes mellitus who start insulin therapy.

Methods: In this prospective study, ocular biometric parameters were obtained using optical biometer (Lenstar LS900®; Haag-Streit AG) and refraction test (ARK-510A Auto refractometer; Nidek Co. Ltd, Aichi, Japan) before and at 3 months after initiating insulin therapy. In addition, patients' fasting blood glucose (FBG), glycosylated hemoglobin (HbA1C), and blood lipid levels were measured at the same time points. Pretreatment and post-treatment results were compared. In addition, associations between ocular parameters with initial dose and type of insulin treatment regimen, HbA1C, and FBG levels were evaluated.

Results: The patients' mean age was 51.2 ± 12.9 (18-73) years. Post-treatment HbA1C and FBG levels ($8.5\% \pm 2.5\%$ and 188.1 ± 111.2 mg/dL, respectively) were significantly lower than pretreatment values ($12\% \pm 1.4\%$ and 325.3 ± 95.7 mg/dL, respectively; $P < 0.001$ for both). There was a significant

positive correlation between the change in HbA1C and the change in lens thickness ($P = 0.03$), and a significant negative correlation between the change in FBG and the change in the spherical equivalent refraction ($P = 0.045$). Insulin dose and treatment regimen type were not significantly correlated with ocular parameters ($P > 0.05$).

Conclusion: HbA1C-lowering glycemic effect of insulin was correlated with a small decrease in lens thickness. Long-term, randomized controlled trials including larger patient numbers are needed to shed light on the long-term effects of insulin use and glycemic control on ocular parameters.

EFFECTS OF THYROID HORMONES IN WOMEN WITH GESTATIONAL DIABETES

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Gynecol Endocrinol. 2022 Jul;38(7):588-591. doi: 10.1080/09513590.2022.2076832. Epub 2022 May 23. PMID: 35604060 DOI: 10.1080/09513590.2022.2076832

Purpose: This study aims to determine the effect of serum free triiodothyronine (fT3), free thyroxine (fT4), thyroid-stimulating hormone (TSH) and fT3/fT4 ratio on the gestational diabetes.

Methods: This multicenter study was conducted by analyzing retrospectively 495 pregnant women who admitted to the Tepecik training and Research Hospital, and Kocaeli Derince training and Research Hospital between January 2017 and December 2019. Seventy-eight pregnant women diagnosed with Gestational Diabetes Mellitus (GDM) and 82 pregnant women without GDM diagnosis were included in the study. The relationship between thyroid markers (TSH, fT3, fT4 and fT3/fT4) and gestational diabetes was determined using logistic regression analysis.

Results: Advanced age, low fT4 and high TSH levels were higher in GDM group, $p < .05$. Results of the logistic regression analysis revealed that the gestational week (OR 20.291, 95% CI 3.132-131.449, $p = .002$), fasting plasma glucose (OR 48.551, 95% CI 9.223-255.582, $p < .001$), HbA1c (OR 13.671, 95% CI 2.977-62.781, $p = .001$) and fT3/fT4 (OR 29.934, 95% CI 3.558-251836, $p = .002$) were the risk factors of GDM.

Discussion: Advanced gestational week, fasting blood glucose, HbA1c and fT3/fT4 ratio are among the risk factors for the development of the gestational diabetes.

RENAL RECOVERY AFTER ACUTE KIDNEY INJURY REQUIRING URGENT HEMODIALYSIS IS NOT ASSOCIATED WITH IMPROVED SURVIVAL OF THE PATIENTS WITH MULTIPLE MYELOMA

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Ir J Med Sci. 2022 Apr 12. doi: 10.1007/s11845-022-03014-w. Online ahead of print. PMID: 35415772 DOI: 10.1007/s11845-022-03014-w

Background: Severe acute kidney injury (AKI) requiring urgent hemodialysis (uHD) is associated with considerable morbidity and mortality in patients with multiple myeloma (MM).

Purpose: To evaluate the renal function, outcome, and survival status of patients with MM who received uHD and to compare their overall survival with MM patients who did not receive uHD.

Materials and methods: A total of 70 eligible MM patients who received uHD were included together with 70 control patients with MM.

Results: In the study group, 11 patients (15.7%) were known to have pre-existing chronic kidney disease. Thirty-four percent of the study group had AKI requiring uHD at MM diagnosis. Seventy-eight percent of the study group had severe AKI due to myeloma kidney. Renal function recovered in 36 patients (51.4%). Patients with MM who became hemodialysis dependent had significantly higher serum creatinine (sCr) levels at the time of AKI compared to patients with renal recovery ($p < 0.05$). Logistic regression analysis showed that high sCr on admission was significantly associated with hemodialysis dependence (odds ratio 0.78; 95% CI: 0.63-0.96; $p = 0.018$). The median overall survival was 30 months [IQR: 26] in the study group and 84 months [IQR: 96.25] in the control group ($p < 0.05$). Cox regression analysis showed that the need for uHD at initial MM diagnosis was associated with reduced survival (hazard ratio (HR) 1.9; 95% CI: 1.1-3.2; $p = 0.017$). Renal recovery did not provide a survival benefit.

Conclusion: The need for uHD was associated with poor survival. Recovery of renal function was not associated with improved survival.

PROBLEM-SOLVING THERAPY CAN REDUCE PSYCHOLOGICAL DISTRESS IN PATIENTS WITH CUSHING'S DISEASE: A RANDOMIZED CONTROLLED TRIAL

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Pituitary. 2022 Dec;25(6):891-902. doi: 10.1007/s11102-022-01275-3. Epub 2022 Sep 1. PMID: 36050587 DOI: 10.1007/s11102-022-01275-3

Objective: To evaluate the effects of online group problem-solving therapy (PST) for reducing negative problem orientation (NPO), psychological distress, and increasing quality of life in patients with Cushing's disease (CD).

Methods: In this randomized trial, we allocated 55 eligible patients to either PST ($n = 28$) or treatment as usual (TAU) ($n = 27$) groups. The analyses primarily relied on intent-to-treat (ITT) principle and were repeated with intervention completers (per-protocol analyses). Social problem-solving inventory-revised short form, Beck Depression Inventory (BDI), General Health Questionnaire-12 (GHQ-12), Perceived Stress Scale (PSS), The Satisfaction with Life Scale, and Cushing's Quality of Life scale were used. Pre-test, post-test, and follow-up measures were obtained. Linear mixed models were used to compare PST and treatment as usual (TAU) groups across time.

Results: Of the total 55 patients with CD, the mean age was 46 ± 12 years, 49 patients (89%) were female, and 41 patients (74.5%) were in remission. The patients within the PST and TAU groups were similar in terms of age, sex, and disease activity. ITT analyses showed a greater reduction of NPO scores in patients who received PST as compared to patients who received usual care ($df = 45.9$, $p = 0.029$, Cohen's $d = 0.47$). The decrease in NPO was sustained at follow-up (mean difference: -2.2 , $p = 0.007$). Results of the ITT analyses revealed no superior benefits of the intervention for psychological distress. However, per-protocol analyses demonstrated that PST provided a greater decrease in BDI, PSS, and GHQ-12 scores.

Conclusion: PST may decrease NPO and improve the psychological well-being of patients with CD.

DIFFERENCES IN CLINICAL ASPECTS BETWEEN SUBACUTE THYROIDITIS ASSOCIATED WITH COVID-19 VACCINES AND CLASSICAL SUBACUTE THYROIDITIS

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Horm Metab Res. 2022 Jun;54(6):380-388. doi: 10.1055/a-1840-4374. Epub 2022 May 1. PMID: 35491014 DOI: 10.1055/a-1840-4374

Subacute thyroiditis (SAT) developed after SARS-CoV-2 vaccines has been less studied. We aimed to compare classical SAT and SAT developed after SARS-CoV-2 vaccines in the context of clinical aspects. Adults with SAT detected in 90 days of COVID-19 vaccination (CoronaVac or Pfizer/BioNTech) were grouped as Vac-SAT. Those with a history of SARS-CoV-2 or upper respiratory tract infection in 6 months before the vaccination, or vaccination with another antiviral vaccine after COVID-19 vaccination were excluded. Those with SAT detected before COVID-19 pandemic were grouped as Classical-SAT. Of total (n=85), female/male (54/31) ratio and age [43 (23-65)] were similar in Vac-SAT (n=23) and Classical-SAT (n=62). Duration between vaccine and SAT was 45 (7-90) days, and similar in CoronaVac-SAT (n=5) and BioNTech-SAT (n=18). SAT-duration was 28 (10-150) days, and higher in Vac-SAT than in Classical-SAT (p=0.023). SAT was developed after the 1st dose vaccine in minority in CoronaVac-SAT (n=2) and BioNTech-SAT (n=3) (p=0.263). Previous LT4 use, and TSH elevation after resolution were more frequent in Vac-SAT than in Classical-SAT (p=0.027 and p=0.041). We included a considerable number of patients with SAT occurred after COVID-19 vaccines. We cannot provide clear evidence regarding the association of COVID-19 vaccines with SAT. SAT associated with CoronaVac or BioNTech seems unlikely to be occurred after the 1st dose, and to have a longer duration, more likely to be associated with previous LT4 use and lead TSH elevation after resolution than Classical-SAT. TSH should be followed-up after the resolution of SAT detected after COVID-19 vaccination.

HEARING IMPAIRMENT AND AUDIOLOGICAL ALTERATIONS IN EUTHYROID HASHIMOTO'S THYROIDITIS

Ömercan Topaloğlu¹, Bayram Şahin²

ORL J Otorhinolaryngol Relat Spec. 2022;84(3):238-246. doi: 10.1159/000517931. Epub 2021 Aug 11. PMID: 34515191 DOI: 10.1159/000517931

Introduction: Hearing loss may be associated with autoimmune diseases, but it was less studied in Hashimoto's thyroiditis (HT). We aimed to evaluate hearing impairment and audiological alterations in adults with euthyroid HT.

Methods: Adult patients with euthyroid HT (normal thyroid functions, positive antithyroid peroxidase (anti-TPO)/anti-thyroglobulin, and sonographic findings) were compared with controls. We excluded pregnant or older patients (>40 years), those with a history of otological/audiological disease or surgery, otitis media, acoustic trauma, chronic illnesses, use of alcohol, cigarette, medications, rheumatoid factor, antinuclear, antimitochondrial, antiparietal, antineutrophil cytoplasmic, anti-smooth muscle, or antigliadin antibodies, abnormal biochemical or otological findings. Tympanometry which indicates tympanic

peak pressure (TPP, daPa), acoustic reflex testing (ART), pure-tone average (PTA), and transient evoked otoacoustic emission (TEOAE) were performed. We grouped the participants according to ART (positive/negative), TEOAE (normal/undetected), and PTA (≤ 20 / >20 decibel).

Results: Air conduction thresholds on the right ear at 500, 4,000, 6,000, and 8,000 Hz, PTA, and the left ear at 250, 4,000, 6,000, and 8,000 Hz were higher in euthyroid HT (n = 36) than in controls (n = 40) (p < 0.05). We found less negative TPP and a higher ratio of negative ART in euthyroid HT (p < 0.05). Euthyroid HT predicted undetected TEOAE and increased hearing threshold on the right ear at 500 and 8,000 Hz (p < 0.001). TEOAE detected audiological abnormality at a higher rate. Anti-TPO was positively correlated with TPP and air conduction thresholds, except the right ear at 8,000 Hz.

Discussion/conclusion: Hearing and audiological tests may be impaired in euthyroid HT. We recommend close monitoring of audiological functions in these patients. TE-OAE more specifically indicates audiological abnormality.

INSULIN-LIKE GROWTH FACTOR-I MIGHT BE A PREDICTOR FOR SEVERE NON-ALCOHOLIC FATTY LIVER DISEASE IN MORBIDLY OBESE PATIENTS

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Horm Metab Res. 2022 Oct;54(10):696-703. doi: 10.1055/a-1856-7014. Epub 2022 May 19. PMID: 35588737 DOI: 10.1055/a-1856-7014

The aim of the study was to compare the IGF-1 levels, metabolic and clinical parameters among the ultrasonographically classified non-alcoholic fatty liver disease (NAFLD) groups and determine the factors that may predict the NAFLD severity in patients with morbid obesity. This study was conducted on 316 morbidly obese patients (250 F/66 M). The data of patients before and 1st-year after bariatric surgery were recorded. According to the ultrasonographically NAFLD screening, patients with normal hepatic features were classified as Group 1 (n=57), with mild and moderate NAFLD were classified as Group 2 (n=219), and with severe NAFLD were classified as Group 3 (n=40). IGF-1 standard deviation scores (SDSIGF1) were calculated according to age and gender. Parameters that could predict the presence and severity of NAFLD were evaluated. IGF-1 levels were significantly associated with Group 3 than Group 1 (p=0.037), and the significance remained between the same groups when IGF-1 levels were standardized as SDSIGF1 (p=0.036). Decreased levels of SDSIGF1 explained 5% of severe NAFLD than the normal group (p=0.036). Liver Diameter, FPG, ALT, AST, and GGT were also found as significant predictors for severe NAFLD. There were significant differences between pre- and postop values in all groups (p<0.001). This study showed that IGF-1 might be considered a significant predictor of severe NAFLD in morbidly obese patients. It is crucial in clinical practice to determine predictive factors of NAFLD that could support the diagnosis accompanied by non-invasive imaging methods.

EVALUATION OF SERUM ANTI-MULLERIAN HORMONE LEVELS IN WOMEN WITH HASHIMOTO THYROIDITIS IN THE REPRODUCTIVE AGE

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Türk J Med Sci. 2021 Apr 30;51(2):716-721. doi: 10.3906/sag-2012-177. PMID: 33705640 PMCID: PMC8203119 DOI: 10.3906/sag-2012-177

Background/aim: Autoimmune thyroid disease in women is associated with subfertility and early pregnancy loss, and patients with primary ovarian insufficiency have a high prevalence of thyroid autoimmune disorders. The aim of this study was to investigate the association between Hashimoto thyroiditis (HT) and ovarian reserve.

Materials and methods: Levels of serum thyroid stimulating hormones, thyroid autoantibodies, and anti-Müllerian hormone (AMH) were measured in women with HT and a healthy control group between 2018 and 2019.

Results: Evaluation was made of 108 premenopausal women with HT, and a control group of 172 healthy females with normal antithyroid antibody levels and thyroid function. Serum AMH levels were determined to be significantly lower in the HT group compared to the control group.

Conclusion: Ovarian reserve evaluated by serum AMH concentration is affected by thyroid autoimmunity independently of antithyroid antibodies type or titers.

COMPARISON OF EFFICIENCIES BETWEEN SHEAR WAVE ELASTOGRAPHY, FINE-NEEDLE ASPIRATION BIOPSY AND AMERICAN COLLEGE OF RADIOLOGY THYROID IMAGING REPORTING AND DATA SYSTEM SCORING SYSTEM IN DETERMINING THE MALIGNANCY POTENTIAL OF SOLID THYROID NODULES

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Ultrasound Q. 2020 Sep 25;37(2):155-160. doi: 10.1097/RUQ.0000000000000531. PMID: 32976319 DOI: 10.1097/RUQ.0000000000000531

We aimed to evaluate the efficiencies of quantitative shear-wave elastography, fine-needle aspiration (FNA) biopsy and American College of Radiology (ACR)-thyroid imaging reporting and data system (TIRADS) scoring system in determining the malignancy potential of solid thyroid nodules. In period between September 2014 and January 2016, 191 solid thyroid nodules of 189 patients were enrolled in this study. The mean shear wave velocities of the nodules were recorded by acoustic radiation force impulse method. All nodules were classified according to ACR-TIRADS scoring system and underwent FNA procedure. The cytopathologic results (after FNA) were benign in nature, atypical-cytology/suspiciously malignant and highly suspicious of malignancy in 117, 28, and 21 nodules, respectively. The specimen from FNA was insufficient in 25 nodules. Thirty-four nodules of 33 enrolled patients were operated, and the efficiencies of shear wave elastography, FNA, and ACR-TIRADS procedures were statistically analyzed; relying on the histopathologic results, the shear-wave elastography had 83.3% sensitivity, 93.7% specificity

(with a cutoff value of 2,74 m/s), the FNA had 94.4% sensitivity, 87.5% specificity, and ACR-TIRADS had 88.2% sensitivity, 94.1% specificity in determining malignant thyroid nodules ($P < 0.005$). Quantitative shear wave elastography is concluded to be an effective, noninvasive, and practical imaging modality with a lesser sensitivity and specificity values than TIRADS unless a lower sensitivity but a higher specificity values than FNA (93.7% vs 87.5%) in considering the malignancy potential of solid thyroid nodules.

STATUS OF WEIGHT CHANGE, LIFESTYLE BEHAVIORS, DEPRESSION, ANXIETY, AND DIABETES MELLITUS IN A COHORT WITH OBESITY DURING THE COVID-19 LOCKDOWN: TURK-COM STUDY GROUP

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Obes Facts. 2022;15(4):528-539. doi: 10.1159/000522658. Epub 2022 May 11. PMID: 35545017 PMCID: PMC9372476 DOI: 10.1159/000522658

Introduction: The coronavirus disease 2019 (COVID-19) pandemic led to a lockdown period. Confinement periods have been related to unhealthy lifestyle behaviors. Our study aimed to determine weight change, changes in eating and exercise habits, the presence of depression and anxiety, and diabetes mellitus (DM) status in a cohort of patients with obesity.

Methods: The study was undertaken in nine centers of Collaborative Obesity Management (COM) of the European Association for the Study of Obesity (EASO) in Turkey. An e-survey about weight change, eating habits, physical activity status, DM status, depression, and anxiety was completed by patients. The International Physical Activity Questionnaire (IPAQ) score was used to determine physical activity in terms of metabolic equivalents (METs). A healthy nutrition coefficient was calculated from the different categories of food consumption. The Patient Health Questionnaire (PHQ-9) and General Anxiety Disorder (GAD-7) Questionnaire were used for determining depression and anxiety, respectively.

Results: Four hundred twenty-two patients (age 45 ± 12.7 years, W/M = 350/72) were included. The healthy nutrition coefficient before the pandemic was 38.9 ± 6.2 and decreased to 38.1 ± 6.4 during the pandemic ($p < 0.001$). Two hundred twenty-nine (54.8%) patients gained weight, 54 (12.9%) were weight neutral, and 135 (32.3%) lost weight. Patients in the weight loss group had higher MET scores and higher healthy nutrition coefficients compared with the weight gain and weight-neutral groups ($p < 0.001$). The PHQ and GAD scores were not different between the groups. Percent weight loss was related to healthy nutrition coefficient (CI: 0.884 [0.821-0.951], $p = 0.001$)

and MET categories (CI: 0.408 [0.222-0.748], $p = 0.004$). One hundred seventy patients had DM. Considering glycemic control, only 12 (8.4%) had fasting blood glucose <100 mg/dL and 36 (25.2%) had postprandial BG <160 mg/dL. When patients with and without DM were compared in terms of dietary compliance, MET category, weight loss status, PHQ-9 scores, and GAD-7 scores, only MET categories were different; 29 (11.7%) of patients in the nondiabetic group were in the highly active group compared with 5 (2.9%) in the diabetic group.

Conclusion: The COVID-19 lockdown resulted in weight gain in about half of our patients, which was related to changes in physical activity and eating habits. Patients with DM who had moderate glycemic control were similar to the general population in terms of weight loss but were less active.

DIFFERENTIATING POLYCYSTIC OVARY SYNDROME FROM ADRENAL DISORDERS

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Diagnostics (Basel). 2022 Aug 24;12(9):2045. doi: 10.3390/diagnostics12092045. PMID: 36140452 PMCID: PMC9498167 DOI: 10.3390/diagnostics12092045

Although polycystic ovary syndrome (PCOS) is primarily considered a hyperandrogenic disorder in women characterized by hirsutism, menstrual irregularity, and polycystic ovarian morphology, an endocrinological investigation should be performed to rule out other hyperandrogenic disorders (e.g., virilizing tumors, non-classical congenital adrenal hyperplasia (NCAH), hyperprolactinemia, and Cushing's syndrome) to make a certain diagnosis. PCOS and androgen excess disorders share clinical features such as findings due to hyperandrogenism, findings of metabolic syndrome, and menstrual abnormalities. The diagnosis of a woman with these symptoms is generally determined based on the patient's history and rigorous clinical examination. Therefore, distinguishing PCOS from adrenal-originated androgen excess is an indispensable step in diagnosis. In addition to an appropriate medical history and physical examination, the measurement of relevant basal hormone levels and dynamic tests are required. A dexamethasone suppression test is used routinely to make a differential diagnosis between Cushing's syndrome and PCOS. The most important parameter for differentiating PCOS from NCAH is the measurement of basal and ACTH-stimulated 17-OH progesterone (17-OHP) when required in the early follicular period. It should be kept in mind that rapidly progressive hyperandrogenic manifestations such as hirsutism may be due to an androgen-secreting adrenocortical carcinoma. This review discusses the pathophysiology of androgen excess of both adrenal and ovarian origins; outlines the conditions which lead to androgen excess; and aims to facilitate the differential diagnosis of PCOS from certain adrenal disorders.

SARS-COV-2 VACCINE-ASSOCIATED SUBACUTE THYROIDITIS

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J Endocrinol Invest. 2022 Jul;45(7):1341-1347. doi: 10.1007/s40618-022-01767-w. Epub 2022 Feb 19. PMID: 35182366 PMCID: PMC8857746 DOI: 10.1007/s40618-022-01767-w

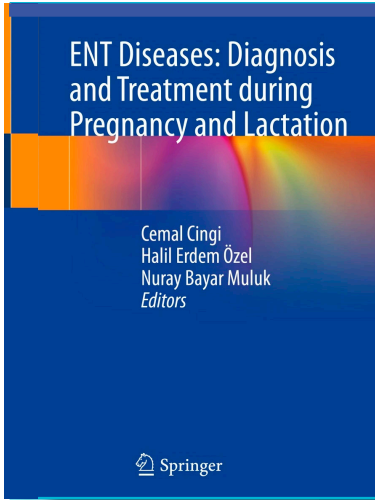
Purpose: With coronavirus disease 2019 (COVID-19), subacute thyroiditis (SAT) cases are on the rise all over the world. COVID-19 vaccine-associated SAT cases have also been reported. In this article, we present our data on 11 vaccine-associated SAT cases.

Methods: Eleven patients were included in the study. Type of the vaccines patients received, time to the occurrence of SAT after vaccination, symptoms and laboratory findings, treatment given, and response to treatment were evaluated.

Results: The age of patients ranged from 26 to 73. Four of the patients were males, and seven were females. Symptoms of six patients were seen after BNT162b2 Pfizer/BioNTech COVID-19 mRNA vaccine®, and four of them after Coronavac inactivated SARS-CoV-2 vaccine®. In one patient, SAT developed after the first dose of BNT162b2, administered after two doses of Coronavac. The average time to the onset of symptoms was 22 days (15-37) after vaccination.

Conclusions: The fact that both whole virus containing and genetic material containing vaccines cause SAT suggests that the trigger may be viral proteins rather than the whole viral particle. Although corticosteroids are commonly preferred in published vaccine-associated SAT cases, we preferred nonsteroidal anti-inflammatory therapy in our patients for sufficient vaccine antibody response. There is not enough information about whether patients who develop SAT can be revaccinated safely considering the ongoing pandemic. Further research is needed for a conclusion in the treatment and revaccination of these patients.

KİTAP BÖLÜMÜ



ENT Diseases: Diagnosis and Treatment during Pregnancy and Lactation

Editörler: Cemal Cingi, Halil Erdem Özel, Nuray Bayar Muluk

Bölüm: Management of Parathyroid Disorders in Pregnancy and Postpartum Period

Bayram Şahin, Ömercan Topaloğlu & Sheng-Po Hao

https://link.springer.com/chapter/10.1007/978-3-031-05303-0_57



Diagnosis and Treatment of Traumatic Brain Injury

Editörler: Rajkumar Rajendram, Victor Preedy, Colin Martin

Bölüm: Chapter 26 - Pituitary dysfunction after traumatic brain injury: A focus on screening, diagnosis, and treatment

Aysa Hacıoglu, Zuleyha Karaca, Fahrettin Kelestimur

<https://www.sciencedirect.com/science/article/pii/B9780128233474000269>

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● **KALSİYUM DÜŞÜKLÜĞÜ (HİPOKALSEMİ) ACİL DURUM KARTI WEB SAYFAMIZDA!**

Değerli üyemiz,

"Osteoporoz ve Diğer Metabolik Kemik Hastalıkları Bilimsel Çalışma Grubu" tarafından hazırlanan "Kalsiyum Düşüklüğü (Hipokalsemi) Acil Durum Kartı" web sayfamızda "Hastalar" bölümüne ve yine hastalar bölümümüzde "Hipoparatiroidizm (Paratiroid Hormon Düşüklüğü)" bilgilendirme metninin altına eklenmiştir.

Ulaşmak için lütfen tıklayınız

Bilgilerinize sunulur.

Saygılarımızla

TEMD Yönetim Kurulu

TURKISH JOURNAL OF ENDOCRINOLOGY AND METABOLISM İSİM DEĞİŞİKLİĞİ

Değerli Üyemiz,

Derneğimizin resmi yayın organı "Turkish Journal of Endocrinology and Metabolism" dergisi "Web of Science (WoS) Emerging Sources Citation Index (ESCI)" alanında yer almaktadır. WoS kapsamında indekslenen dergilerin atıf performanslarını inceleyen "Journal Citation Reports"un (JCR) haziran ayında yayınlanan raporuna göre dergimiz 0,04 seviyesindeki Journal Citation Indicator (JCI) değeriyle "Endocrinology and Metabolism" kategorisinde indekslenen dergiler arasında Q4 seviyesinde yer almaktadır.

Bu durum TJEM için hedeflediğimiz seviyenin altındadır. Yayın kurulu olarak dergimizin PubMed'e girmesi ve Science Citation Index Expanded (SCIE) kapsamında indekslenmesi için gerekli hazırlık ve düzenlemeler üzerinde çalışmaya devam etmekteyiz. Ancak PubMed başvurularımız makale kalitesi, yetersiz atıf sayısı ve uzun değerlendirme süreleri neden gösterilerek maalesef iki kez reddedilmiştir.

Hedeflerimiz doğrultusunda bu yıl uluslararası alanda daha aktif bir yayınevi olan AVE ile çalışmaya başlanmış ve birçok uluslararası dergi tarafından kullanılan kullanıcı dostu "Manuscript Manager" sistemine geçiş yapılmıştır.

AVES yayınevi aşağıda sıralanan nedenlerle dergimizde bir isim değişikliği yapılmasını önermiştir.

Bir ülke veya bölgeyi işaret eden dergi isimleri, özellikle uluslararası okuyucu ve araştırmacıların dergilere katılımını negatif etkilemektedir.

Geniş bir kitleye hitap eden kapsayıcı bir isim kullanmamız dergimiz için önemlidir ve belirlediğimiz hedeflere ulaşmamızı hızlandıracaktır.

Benzer isim değişiklikleri, ülkemizdeki tıp dergileri arasında olumlu sonuçlar vermiştir (örneklerle tarafımıza açıklanmıştır).

Bu konuda 43. TEMHK sırasında yapılan toplantımıza katılan Onur ve Yayın Kurulu üyeleri arasında olumlu bir görüş alınmış ve bu doğrultuda Onur ve Editör Kurulu üyelerinin görüşlerinin alındığı bir anket yapılmıştır.

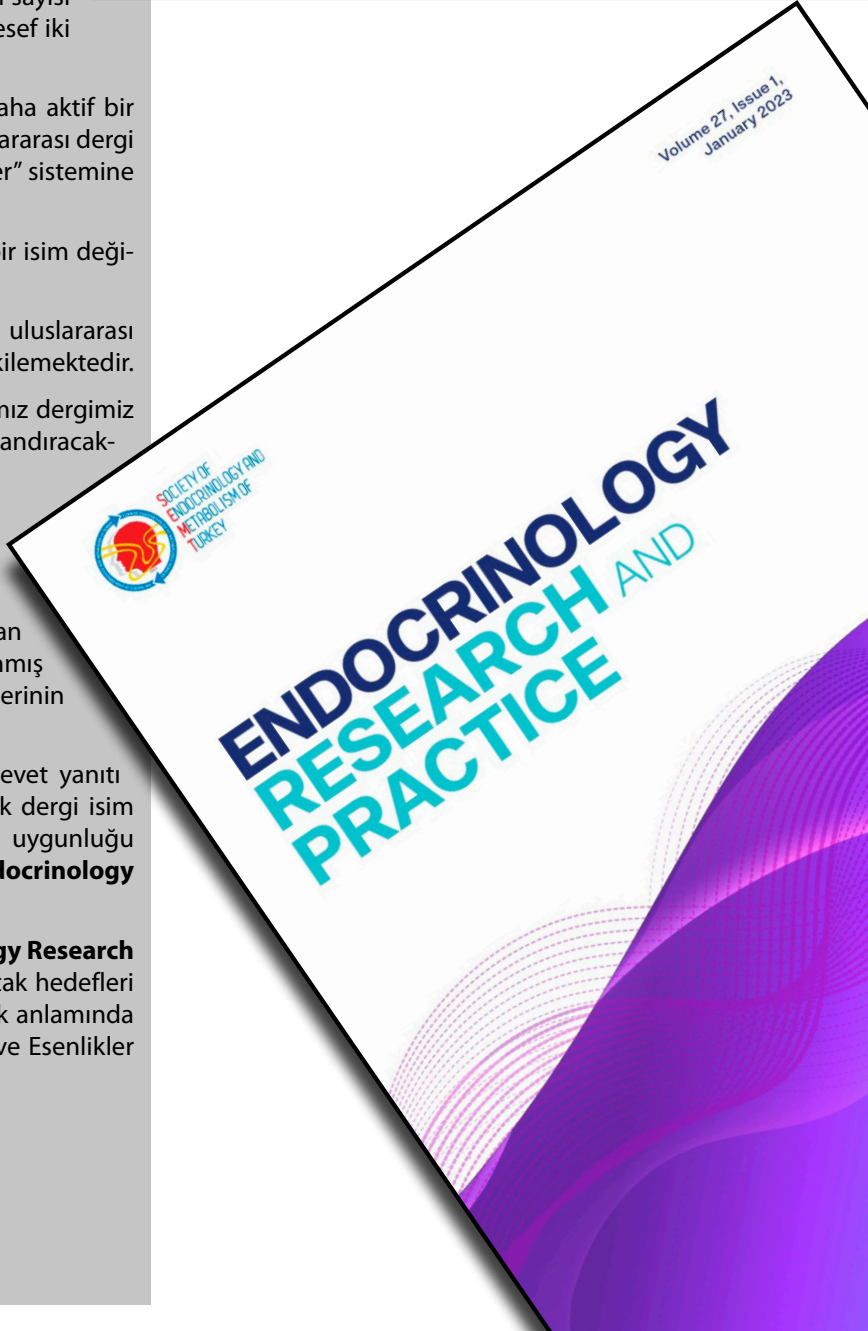
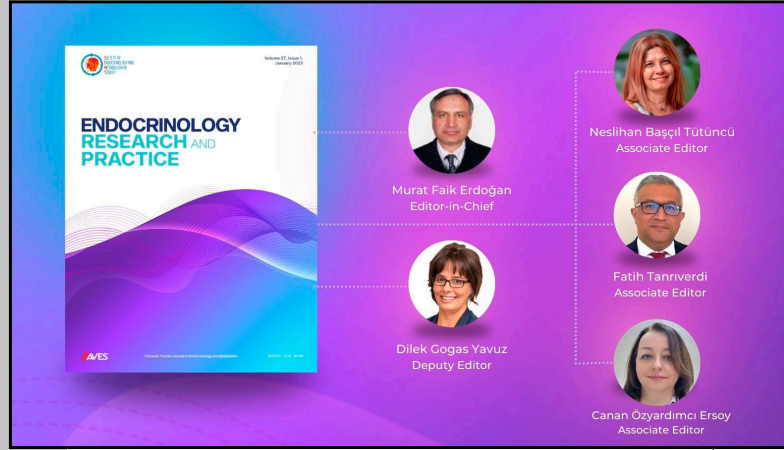
Ankete katılan Onur ve Editör Kurulu üyelerinin %67 evet yanıtı doğrultusunda editörler kurulu ve yönetim kurulu olarak dergi isim değişikliği kararı alınmış, gelen isim önerileri ve ISSN uygunluğu değerlendirilerek dergi adımızın 2023 yılı itibari ile "**Endocrinology Research and Practise**" olması kararı alınmıştır.

Dergimiz yayın hayatına 2023 yılı itibariyle "**Endocrinology Research and Practise**" olarak devam edecektir. Derneğimizin ortak hedefleri doğrultusunda, siz değerli üyelerimizin yayın ve hakemlik anlamında değerli desteklerinizi esirgemeyeceğinizi umuyor Sağlık ve Esenlikler diliyoruz.

Bilgilerinize saygılarımızla sunarız.

TJEM Editörler Kurulu

TEMD Yönetim Kurulu



ÜYELERİMİZDEN HABERLER



Değerli Üyemiz,

Üyelerimizden İstanbul Üniversitesi, İstanbul Tıp Fakültesi, Endokrinoloji ve Metabolizma Bilim Dalı Öğretim Üyesi, Sayın Prof. Dr. Nevin Dinççağ emekli olmuştur. Sayın Prof. Dr. Nevin Dinççağ'a sağlıklı bir emeklilik dönemi dileriz

Saygılarımızla
TEMED Yönetim Kurulu



Hatay Mustafa Kemal Üniversitesi Tıp Fakültesi Öğretim Üyesi
Doç. Dr. Eren Gürkan'ın editörlüğünü yaptığı "Endokrin Vakalar-4"
Adlı kitap yayınlandı.

Kitaba ulaşmak için lütfen [tıklayınız..](#)

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