TÜRKİYE ENDOKRİNOLOJİ VE METABOLİZMA DERNEĞİ BÜLTENİ

Üç ayda bir çevrimiçi yayınlanır.

Sayı 84 • Ekim – Kasım – Aralık • 2023

CUMHURİYET 100 YAŞINDA

CUMHURİYETİMİZİN 100. YILINI BURSA'DA ENDOKURS-7'DE KUTLADIK

ENDOKURS-7 TAMAMLANDI

ENDOKURS-7 (Mezuniyet Sonrası Eğitim Kursu) Cumhuriyetimizin 100. yılında, 26-29 Ekim 2023 tarihleri arasında Bursa'da Crowne Plaza Otelinde gerçekleşti. Toplam 420 meslektaşımızın katıldığı ve her yıl olduğu gibi kongre tadında gerçekleşen ENDOKURS-7'de 56 konuşmacı ve 63 oturum başkanı görev aldı. Endokrinoloji ve Metabolizma Hastalıklarının her alanından deneyimli hocalarımız tarafından yapılan 12 Konferans, 15 Panel, 8 Uydu Sempozyumu büyük ilgi çekti. Sözel ve Poster Bildiri Oturumları ve Olgu Toplantısı yapıldı. Bunların yanı sıra Ustalara Saygı Oturumu ve Genç Araştırıcı Oturumu da bu sene ENDOKURS-7 programında yer aldı. Bir önceki dönemde Türkiye Endokrinoloji ve Metabolizma Derneği (TEMD) Yönetim Kurulu Üyeliği yapmış ve bu dönemde görev süreleri sona ermiş olan Başkan Prof. Dr. Ayşegül Atmaca, Genel Sekreter Prof. Dr. Sibel Güldiken, Araştırma Sekreteri Prof. Dr. Dilek Gogas Yavuz, Sayman Prof. Dr. Mustafa Kulaksızoğlu ile Bilimsel Çalışma Grupları Başkanları Prof. Dr. Fahri Bayram, Prof. Dr. Zeynep Cantürk, Prof. Dr. Serpil Salman ve Prof. Dr. Yüksel Altuntaş'a Endokrinoloji ve Metabolizma Hastalıkları Bilimine ve TEMD'e yaptıkları katkı nedeniyle teşekkür belgesi verildi.

1. Endokrin Bozucular Sempozyumu ENDOKURS-7 öncesinde gerçekleşti

Derneğimizin resmi bilimsel dergisi Endocrinology Research and Practice'in içeriğinden hazırlanan soruların sorulduğu, bu yıl ilk kez düzenlenen, 1. Olgu Yarışması çok ilgi çekti. Ayrıca Endokrinoloji ve Metabolizma Hastalıkları Yeterlik Sınavı da ENDOKURS-7 sırasında yapıldı. ENDOKURS-7 öncesinde yapılan 1. Endokrin Bozucular Sempozyumu da çok sayıda katılımcı tarafından dikkatli bir şekilde izlendi. Sempozyumun açılışında TEMD Başkanı Prof. Dr. Mustafa Cesur ve Endokrin Bozucular Komisyonu Başkanı Prof. Dr. İlhan Yetkin birer açılış konuşması yaptı.

Başkanlığını Prof. Dr. Mustafa Cesur'un, Bilimsel Sekreterliğini Prof. Dr. Sibel Güldiken ve Prof. Dr. Canan Ersoy'un yaptığı ENDOKURS-7'nin açılış programında, Oturum Başkanlığını Prof. Dr. Sadi Gündoğdu ve Prof. Dr. Mustafa Cesur'un üstlendiği Ustalara Saygı Oturumu yapıldı ve Prof. Dr. Nevin Dinççağ ile Prof. Dr. İlhan Yetkin konuştu. Her iki hocamızın mesleki tecrübelerini ve yaşamlarından kesitleri anlattıkları konuşmaları, kursumuza renk kattı.

Genç Araştırıcı Ödülü bu yıl eşit toplam puan alan Doç. Dr. Asena Gökçay Canpolat ve Doç. Dr. Sema Hepşen'e verildi. Her iki genç araştırıcı da kısa birer konuşma ile ailelerine ve kendilerinin yetişmesine katkısı olan hocalarına teşekkür etti.

ENDOKURS-7'nin sırasında gerçekleşen Endocrinology Research and Practice Olgu Yarışmasını 10 sorudan 9'una doğru yanıt veren Uzm. Dr. Fatma Avcı Merdin kazandı.

ENDOKURS-7'nin'de 29 adet sözlü ve 30 adet poster olmak üzere toplam 59 bildiri sunuldu. Sözel ve poster bildiri ödülleri için yapılan hakem değerlendirmeleri sonucunda 3'ü sözlü ve 3'ü poster bildirisi olmak üzere toplam 6 bildiriye ödül verildi. Kongre bildiri kitabına linkten ulaşabilirsiniz.

28 Ekim Cumartesi gecesi yaklaşık 101 yıl önce Mudanya Ateşkes Anlaşmasının yapıldığı Bursa'nın Mudanya ilçesinde, daha önce tarihi gar olan şimdi ise Montania Hotel olarak kullanılan mekanda Cumhuriyetimizin 100. Yıl Balosu yapıldı. Cumhuriyet pastasını Cumhuriyetin ilk 100 yıllık döneminde Derneğimizde başkanlık yapmış hocalarımız Prof. Dr. Gürbüz Erdoğan, Prof. Dr. Şazi İmamoğlu, Prof. Dr. Sadi Gündoğdu, Prof. Dr. Sait Gönen, Prof. Dr. Füsun Saygılı, Prof. Dr. Ayşegül Atmaca ve Prof. Dr. Mustafa Cesur birlikte kestiler. 29 Ekim Pazar günü Cumhuriyet Bayramı kutlama töreninin ardından, Cumhuriyet Özel Oturumunda Prof. Dr. Mustafa Cesur "Cumhuriyet Döneminde Türkiye Endokrinoloji Tarihi", Prof. Dr. Ayşegül Atmaca ile Prof. Dr. Kubilay Karşıdağ "100. Yılında Cumhuriyetimiz ve Atatürk" başlıklı konferansları verdi ve ENDOKURS-7 bilimsel programı tamamlandı. Bildiri ödüllerinin verilmesi sonrasında Prof. Dr. Canan Ersoy ve Prof. Dr. Mustafa Cesur'un kapanış konuşmalarıyla ENDOKURS-7 sona erdi.

Hocalarımızın bilgi ve deneyimlerini aktardığı oturumlar her yıl olduğu gibi bu yıl da büyük bir ilgi ile takip edildi. Bütün konuşmacılar, özgürce kendimizi ifade edebilmemizi sağlayan Cumhuriyetimize bağlılıklarını bildirdiler ve kurucu liderimiz, büyük önder Mustafa Kemal Atatürk'ü saygı, şükran ve minnetle andılar.

Kursumuza emek ve değerli zamanlarını harcayan bilimsel kurul üyelerine, konuşmacı ve oturum başkanı olarak görev alan hocalarımıza, katılımlarıyla kursumuza değer katan meslektaşlarımıza, destek veren ilaç firmalarına ve başarılı çalışmaları için organizasyon firmasına teşekkür ederiz. 31 Ekim 2024 günü ENDOKURS-8'de, Şanlıurfa'da buluşmak üzere.

Prof. Dr. Mustafa Cesur
TEMD ve ENDOKURS-7 Başkanı

Prof. Dr. Sibel Güldiken
ENDOKURS-7 Bilimsel Sekreteri

Prof. Dr. Canan Ersoy
ENDOKURS-7 Bilimsel Sekreteri

POSTER BİLDİRİ ÖDÜLLERİ

Birincilik Ödülü

Aromataz İnhibitörü ve Gonadotropin Kombine Tedavisiyle Fertilite Sağlanan Dirençli Prolaktinoma Olgusu
Erhan Hocaoğlu, Coşkun Ateş, Filiz Mercan Sarıdaş, Müge Yaşar, Kadircan Karatoprak, Soner Cander, Canan Ersoy, Erdinç Ertürk, Özen Öz Gül

İkincilik Ödülü

Levotiroksin Emilim Kusuru Olan Zor Bir Vaka
Ömer Komaç, Deniz Çetin, Mustafa Ünübol, Engin Güney

Üçüncülük Ödülü

Daha Fazla Mortalite, Daha Az Tanı: Bir Non-Obez NAFLD Vakası
Seda Karslı, Meral Mert

SÖZEL BİLDİRİ ÖDÜLLERİ

Birincilik Ödülü

Metabolik Olarak Sağlıklı Olan ve Olmayan Obez Hastalarda 1 mg Deksametazon Supresyon Testi ile Yapılan Cushing Sendromu Tarama Sonuçlarının Değerlendirilmesi
Sema Hepşen, Ümran Gül, Hayri Bostan, Pınar Akhanlı, Muhammed Erkam Sencar, Muhammed Kızılgül, İlknur Öztürk Ünsal, Erman Çakal

İkincilik Ödülü

Hafif/Asemptomatik Primer Hiperparatiroidi Kalpte Fonksiyonel Değişikliklere Neden Olur: Ilımlı Hiperparatiroidisi Olan Hastalarda Kalbin Kardiyak MRG ve Kardiyokinlerle Değerlendirilmesi
Uğur Özberk, Tuncay Hazırolan, Selin Ardalı Düzgün, İncilay Lay, Tomris Erbaş, Süleyman Nahit Şendur

Üçüncülük Ödülü

Obezite Hastalarında Karaciğer Fibrozu ve Metabolik Riskin Taranmasında Fibrozis-4 (Fib-4) Skorunun Rolü
Alper Sönmez, Mehmet Can Kutlar, Cüneyd Anıl, Gökhan Kabaçam, Berna İmge Aydoğan, Alptekin Gürsoy, Mustafa Cesur

PRATİK TİROİDOLOJİ KURSU, TİROKURS-28 TAMAMLANDI

Yirmisekizinci Pratik Tiroidoloji Kursu TİROKURS-28, 14 Ekim 2023 tarihinde Ankara Üniversitesinde yaklaşık 175 meslektaşımızın katılımı ile gerçekleştirilmiştir. Emeği geçen tüm üyelerimize teşekkür eder, saygılarımızı sunarız.

18. HİPOFİZ SEMPOZYUMU TAMAMLANDI

18. Hipofiz Sempozyumu 11 Kasım 2023 tarihinde, Hacettepe Üniversitesi, Kültür Merkezinde 218 meslektaşımızın katılımı ile gerçekleştirilmiştir. Emeği geçen tüm üyelerimize teşekkür eder, saygılarımızı sunarız.

14 KASIM DÜNYA DİYABET GÜNÜ-DİYABET PARLAMENTOSU

14 Kasım Dünya Diyabet Günü'nde Sosyal Güvenlik Kurumunun ev sahipliğinde diyabet alanında çalışan vakıf ve derneklerin, diyabetli hastalar ve yakınlarının katılımı ile 13. Diyabet Parlamentosu gerçekleştirildi. Daha iyi bir diyabet yönetimi için sorunlar ve olası çözüm önerilerinin enine boyuna tartışıldığı toplantıya Derneğimizi temsilen Başkan Prof. Dr. Mustafa Cesur ve Başkan Yardımcısı Prof. Dr. Ayşe Kubat Üzüm katıldı.

6. NADİR GÖRÜLEN METABOLİZMA HASTALIKLARI SEMPOZYUMU TAMAMLANDI

6. Nadir Görülen Metabolizma Hastalıkları Sempozyumu 2-3 Aralık 2023 tarihlerinde, Wyndham Garden Hotel, Diyarbakır'da 105 meslektaşımızın katılımı ile gerçekleştirilmiştir. Emeği geçen tüm üyelerimize teşekkür eder, saygılarımızı sunarız.

14 KASIM DÜNYA DİYABET GÜNÜ ETKİNLİKLERİ

Türkiye Endokrinoloji ve Metabolizma Derneği-Diyabet Çalışma Grubu 14 Kasım 2023 Dünya Diyabet Günü'nde diyabet farkındalığını artırmak ve "Diyabete Dur" diyebilmek amacı ile Türkiye çapında halka yönelik ortak bir faaliyet düzenledi ve tüm coğrafi bölgelerimizde eş zamanlı hasta okulları gerçekleştirildi.

Diyabetin Mavi Masası Projesi

Değerli Üyemiz,

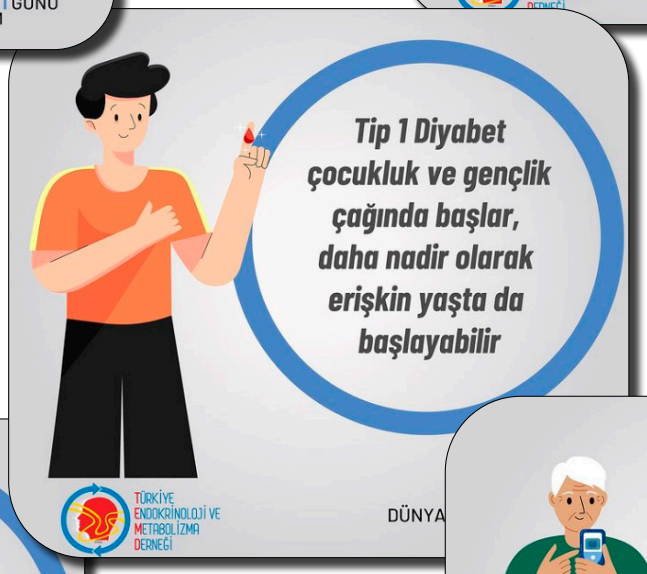
Türkiye Endokrinoloji ve Metabolizma Derneği olarak, 14 Kasım Dünya Diyabet Günü'nde Boehringer Ingelheim'ın koşulsuz desteği ile **"Diyabetin Mavi Masası"** Projesi'ne imza attık.

Değerli hekimlerimiz TEMD Yönetim Kurulu Başkan Yardımcısı Prof. Dr. Ayşe Kubat Üzüm ve TEMD Yönetim Kurulu Üyesi Prof. Dr. Mine Adaş'ın Diyetisyen Elvan Odabaşı, Şef Şerife Aksoy, Eski Milli Voleybolcu Neslihan Demir ile beraber gerçekleştirdiği ve diyabetle ilgili her detayın konuşulduğu bilgilendirici ve keyifli sohbetlere aşağıdaki linklerden ulaşabilirsiniz.

https://www.instagram.com/p/CzoPdReorRP/
https://www.instagram.com/p/Cz6ThmPo03X/
https://www.instagram.com/p/C0MS5T9oqIL/
https://www.instagram.com/p/C0eWAYAICpF/

ENDOKRİN AKADEMİ YENİ MODÜLLERİMİZ

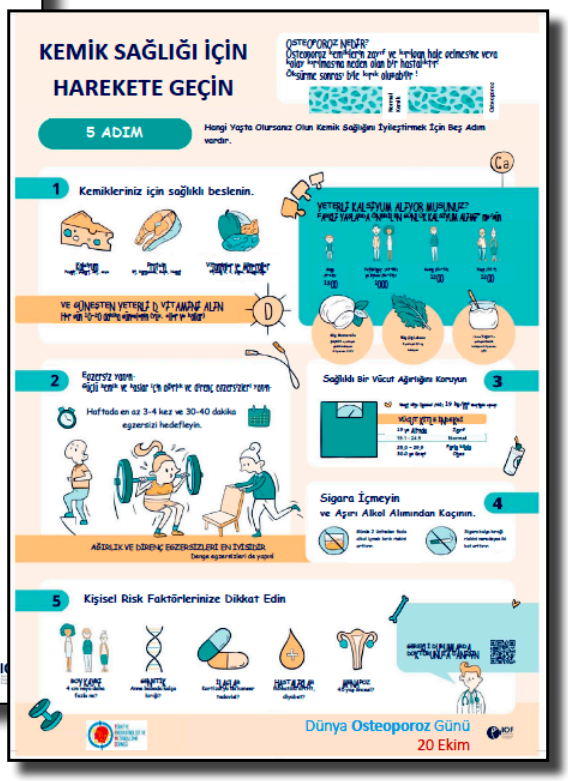
SOSYAL MEDYA PAYLAŞIMLARIMIZ



20 Ekim Dünya Osteoporoz Gününde Türkiye Endokrinoloji ve Metabolizma Derneği-Osteoporoz ve Diğer Metabolik Kemik Hastalıkları Grubu tarafından toplumun osteoporoz ve kırık riski ile ilgili farkındalığını artırmak üzere aktivitelerde bulunuldu.

20 EKİM DÜNYA OSTEOPOROZ GÜNÜ

Prof. Dr. Özen Öz Gül



10. TÜRKİYE TİROİD HASTALIKLARI KONGRESİ TAMAMLANDI

10. Türkiye Tiroid Hastalıkları Kongresi, 14-17 Aralık 2023 tarihleri arasında, Ankara Divan Otel'de gerçekleşti. Kongre Başkanlığını Prof. Dr. Mustafa Cesur, Bilimsel Kurul Başkanlığını Tiroid Çalışma Grubu Başkanı Prof. Dr. Mustafa Şahin, Kongre Bilimsel Sekretaryasını Prof. Dr. Erman Çakal ve Prof. Dr. Hülya Gözü'nün yürüttüğü kongremiz 213 meslektaşımızın katılımı ile tamamlandı.

Dört gün süren ve ilgi ile takip edilen kongremizde, kongre öncesinde temel ultrasonografi kursu gerçekleşti, klinik ve temel tiroidoloji alanında en çok merak edilen güncel konulara yer verildi. Hocalarımızın deneyimlerini aktardığı 16 Konferans, 7 Panel yer aldı. Kongremiz sırasında girişimsel tiroid deneyimleri, tiroid kanseri aktif izlem deneyimleri, tiroid onkolojisi alanındaki tanısal, prognostik ve tedavi açısından son gelişmeler, tiroid kanser genetiğindeki ilerlemeler, tiroid fonksiyon bozuklukları ve tiroid oftalmopati alanlarındaki gelişmeler her yönüyle ele alındı ve alanlarında kendilerini kanıtlamış 8 yabancı konuşmacı olmak üzere 38 konuşmacı ve 62 oturum başkanı destek verdi.

Türkiye Endokrinoloji ve Metabolizma Başkanı ve Kongre Başkanı Prof. Dr. Mustafa Cesur'un ve Tiroid Hastalıkları Bilimsel Çalışma Grubu Başkanı ve Kongre Bilimsel Kurul Başkanı Prof. Dr. Mustafa Şahin'in açılış konuşması ile başlayan kongremizde Ustalara Saygı Oturumunda değerli hocalarımız Prof. Dr. Gürbüz Erdoğan ve Prof. Dr. Faruk Alagöl birer konuşma yaptı ve kendilerine Endokrinoloji Bilimine, Tiroidolojiye ve Derneğimize katkıları nedeniyle plaket takdim edildi.

Otuz adet sözlü ve 43 adet poster bildiri olmak üzere toplam 73 bildiri sunulan kongrede, 3 sözlü ve 3 e-poster bildiriye ödüller verildi. Kongre bildiri kitabına ve kongre fotoğraflarına linkten ulaşabilirsiniz. Emeği geçen tüm meslektaşlarımıza teşekkür eder, başarılar dileriz.

Saygılarımızla

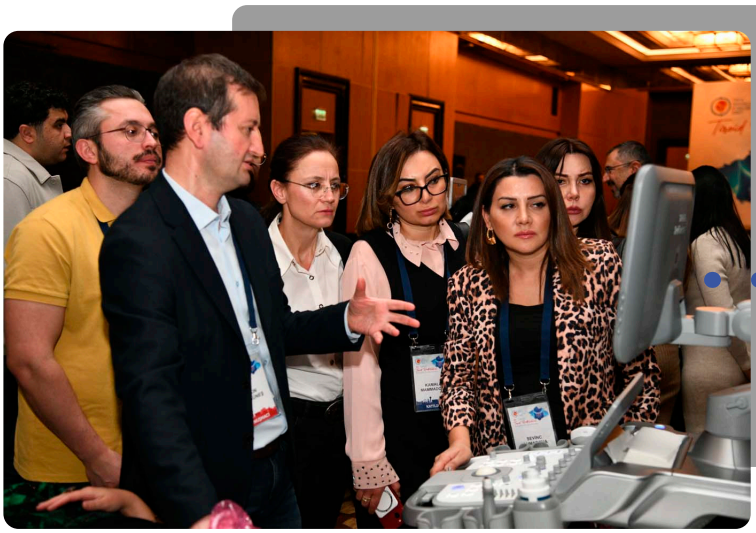
Prof. Dr. Mustafa Cesur
TEMD Başkanı & 10.TTHK Başkanı

Prof. Dr. Mustafa Şahin
TBÇG Başkanı & Bilimsel Kurul Başkanı

Prof. Dr. Erman Çakal
Kongre Sekreteri

Prof. Dr. Hülya Gözü
Kongre Sekreteri

TEMEL TİROİD ULTRASONOGRAFİ KURSU



BİLDİRİ ÖDÜLLERİ

SÖZEL BİLDİRİ ÖDÜLLERİ

Birincilik Ödülü

COVID-19 AŞILARI SONRASI OLUŞAN YENİ VE NÜKS GRAVES' HASTALIĞI VE GRAVES' ORBİTOPATİ GELİŞİMİ VE KLİNİK SEYİRLERİ (TÜRK GRAVES'SARS-VAC ÇALIŞMASI)

Asena Gökçay Canpolat , Atilla Elhan, Mustafa Cesur, Ziynet Alphan Üç, Seçkin Yılmaz, Hülya Ilıksu Gözü, Mehmet Aşık, Hayri Bostan, Bekir Uçan, Tuğçe Şah Ünal, Merve Yılmaz, Ayşe Kubat Üzüm, Mehmet Çağrı Ünal, Cüneyd Anıl, Ümmü Mutlu, Nurcan İnce, Sevgül Fakı, Güven Barış Cansu, Mehmet Sercan Ertürk, Ayten Oğuz, Mustafa Aydemir, Şefika Burçak Polat, Oya Topaloğlu, Reyhan Ersoy, Bekir Çakır, Ayşe Merve Ok, Ersen Karakılıç, Muhittin Yalçın, Yusuf Kayhan, Kader Uğur, Dilek Yazıcı, Alper Gürlek, Tülay Omma, Emre Sedar Saygılı, Adnan Batman, Banu Kara, Göknur Yorulmaz, Bahri Evren, Füsun Baloş Törüner, Bülent Okan Yıldız, Murat Faik Erdoğan, Faruk Alagöl, Erman Çakal, Mustafa Şahin

İkincilik Ödülü

TİROİD İNCE İĞNE ASPİRASYONU İLE BRAF VE RAS MUTASYON ARAMASI İÇİN YIKAMA ÖRNEĞİNİN KULLANIMI: İLK VERİLERİMİZ

Cevdet Aydın, Sevgül Fakı, Ahmet Cevdet Ceylan, Hüsniye Başer, Gülsüm Karaahmetli, Ayşegül Aksoy Altınboğa, Oya Topaloğlu, Reyhan Ersoy, Bekir Çakır

Üçüncülük Ödülü

IgG4 İLİŞKİLİ TİROİD HASTALIKLARININ OLASI YENİ BİR FENOTİPİ: DİFFÜZ SKLEROZAN VARYANT PAPİLLER TİROİD KARSİNOMU

Süleyman Nahit Şendur, Aslı Noyan, Burçin Gönül İremli, Cenk Sökmensüer

POSTER BİLDİRİ ÖDÜLLERİ

Birincilik Ödülü

CUSHİNG SENDROMU VAKASINDA LOKALİZASYON İÇİN YENİ BİR YÖNTEM: LENF NODU ACTH YIKAMA

Alperen Onur İşler, Süleyman Nahit Şendur, Burçin Gönül İremli , Ömer Cennet, Serkan Uysal, Sevgen Önder, Ahmet Bülent Doğrul, Uğur Ünlütürk, Alper Gürlek

İkincilik Ödülü

NADİR VE AGRESİF BİR TÜMÖR: TİROİD ANJİOSARKOMU

Oğulcan Boz, Burçak Cavnar Helvacı, Özgür Özçelik, Bekir Uçan, Erman Çakal, Muhammed Kızılgül

Üçüncülük Ödülü

ATİPİK TİROİDİT KLİNİĞİ İLE BAŞVURAN PRİMER TİROİD LENFOMASI VE PAPİLLER TİROİD KANSERİ BİRLİKTELİĞİ

Gülce Ecem Kılıç, Sevde Nur Fırat, Işılay Taşkaldıran, Gönül Varan Koç

Kongremizin son gününde davetli konuşmacılarımızdan Dr. Bryan McIver' in 16 Aralık 2023 tarihinde ani vefat ettiği haberini aldık. Tiroidoloji alanında çok değerli bir bilim insanı olan McIver' in kaybı endokrinoloji camiamızı derinden üzdü ve kongre kapanış töreni sırasında saygı duruşunda bulunuldu.

ERKEN KARİYER GRUBU ENDOKRİN KARİYER TOPLANTILARIMIZ...

Bir gün içerisinde 3 meslektaşımız hayatlarına son vererek aramızdan ayrıldılar. Hekimlik onurunu korumak, ruhsal ve bedensel sağlığımızı devam ettirmek, emeğimizin hakkını alarak YAŞAMAK ve YAŞATMAK istiyoruz...

TÜRKİYE ENDOKRİNOLOJİ VE METABOLİZMA DERNEĞİ

Dünya Nöroendokrin Tümör (NET) Farkındalık Günü

10 Kasım

TÜRKİYE ENDOKRİNOLOJİ VE METABOLİZMA DERNEĞİ

Acımız Büyük

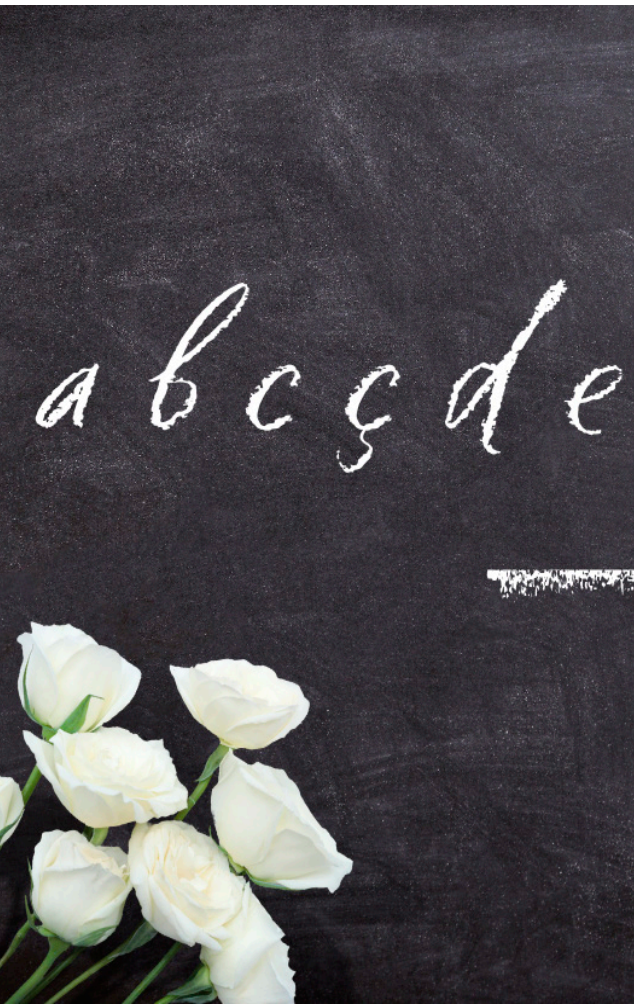
Vatan savunmasında hayatlarını kaybeden
Mehmetçiklerimizi
rahmet ve minnetle anıyor,
şehitlerimizin acılı ailelerine ve
milletimize baş sağlığı ve sabır diliyoruz.

TÜRKİYE ENDOKRİNOLOJİ VE METABOLİZMA DERNEĞİ

29 ekim
CUMHURİYET BAYRAMI
Kutlu Olsun

CUMHURİYETİMİZİN
100 YILI
KUTLU OLSUN
TÜRKİYE
ENDOKRİNOLOJİ VE
METABOLİZMA
DERNEĞİ

10 KASIM
Özlem ve saygıyla anıyoruz...
TÜRKİYE
ENDOKRİNOLOJİ VE
METABOLİZMA
DERNEĞİ


abcçde

"Öğretmenler,
sizin başarınız
CUMHURİYETİN
başarısı olacaktır."
24 Kasım
Öğretmenler
Gününüz
Kutlu Olsun
TÜRKİYE
ENDOKRİNOLOJİ VE
METABOLİZMA
DERNEĞİ

Yeni yılın
ülkemize sağlık, huzur, mutluluk ve
barış getirmesini dileriz.

TÜRKİYE
ENDOKRİNOLOJİ VE
METABOLİZMA
DERNEĞİ

Kongre, Kurslar ve Sempozyumlar

TÜRKİYE
ENDOKRİNOLOJİ VE
METABOLİZMA
DERNEĞİ
TEMD
60
YAŞINDA
ENDOKURS
www.temdendokurs.org
MEZUNİYET SONRASI EĞİTİM KURSU
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Feniks Kongre Organizasyon
Sukarno Cad. No:31 Yıldız, Çankaya – ANKARA Tel: +90 312 442 70 40
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20 EKİM DÜNYA OSTEOPOROZ GÜNÜ BASIN BİLDİRİSİ

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

Osteoporoz (kemik erimesi) kemik dokusunun yoğunluğunun azalması ve mikro yapısının bozulması ile karakterize, kırık riskinin arttığı metabolik bir kemik hastalığıdır. Her yaşta görülmekle beraber genellikle erişkinlerde görülür ve ileri yaşlarda bireylerin karşılaştıkları en önemli sağlık problemlerinden birisidir. Gelişmiş ve gelişmekte olan toplumlarda yaşlı nüfusun artışı ile problem önemli bir boyut kazanmıştır.

Günümüzde bile 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.

Menopoz sonrası dönemde yaygın olarak görülen osteoporoz, sadece kadınların hastalığı olmayıp, erkekleri de etkilemektedir. 50 yaşın üzerindeki her 3 kadından birinin ve her 5 erkekten birinin hayatının bir döneminde kırık yaşayacağı öngörülmekte, tüm dünyada her üç saniyede bir kırık oluştuğu ve yılda 9 milyon kırık vakası olduğu tahmin edilmektedir. Ülkemizde yapılan çalışmalarda da 50 yaş üzerindeki her 4 kişiden birinde osteoporoz bulunduğu belirlenmiştir. Yaşam boyu yapılan fiziksel aktivitelerin teknolojik gelişmeler ile giderek azalması, süt ürünleri yerine şekerli içeceklerin tercih edilmesi, sedatif ilaçların kullanımının artması, sigara ve alkol tüketimi gibi nedenler osteoporozun artış nedenleri arasında görülmektedir.

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 olamadığı 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.

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 kadınlar 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 gelişmesi, üç aydan uzun süre ≥5 mg/gün prednisolon ya da eşdeğeri glukokortikoid (kortizon tedavisi) kullanımı, romatizmal bir hastalığa sahip olmak, sigara ve aşırı alkol tüketimi, boyda 4 cm' den fazla kısalma, düşük vücut ağırlığı, geç adet görme, 45 yaşından önce erken menopoza girme, ailede kalça kırığı bulunması durumlarından herhangi birisi varsa mutlaka bir hekime başvurularak gerekli taramalar yapılmalıdır.

Osteoporoz önlenebilir ve tedavi edilebilir bir hastalıktır.

Çocukluktan itibaren düzenli beslenme ve egzersiz ile osteoporoz önlenebilir, tanı konduğu zaman tedavi edilerek kırıklar önlenebilir. Sağlıklı ve dengeli beslenmeye dikkat edilmeli, sigara ve aşırı alkol tüketiminden kaçınılmalıdır. Yeterli miktarda kalsiyum, protein ve D vitamini alınmalıdır. Düzenli fiziksel aktiviteler ve açık havada zaman geçirmekte bu hastalığı önlemede önemli katkı sağlamaktadır. Ayrıca ailede bu hastalığa yakalanmış olanlar varsa, bu kişilerin kontrollerine özel önem göstermeleri gerekmektedir.

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

DÜNYA NÖROENDOKRİN TÜMÖR (NET) FARKINDALIK GÜNÜ BASIN BİLDİRİSİ

Ülkemizde her 10 Kasım Gazi Mustafa Kemal Atatürk'ü kaybettiğimiz gün olması nedeniyle Atatürk'ü anma günü olarak belirlenmiştir. Cumhuriyetimizin kurucusu olan Ata'mızı ve silah arkadaşlarını saygı ve minnetle anıyoruz.

Dünyada ise 10 Kasım günü nöroendokrin tümörler ve kanserlere dikkat çekmek amacıyla Dünya Nöroendokrin Kanser Günü olarak kabul edilmiştir. Nadir görülen tümörler olsa da artan farkındalık ve görüntüleme yöntemlerinin sık kullanımı ile birlikte sıklığı giderek artmaktadır.

Nöroendokrin tümörler vücudumuzdaki nöroendokrin hücrelerden kaynaklanan tümörlerdir. Nöroendokrin hücreler vücudumuzda bulunduğu yere göre ortamı algılayıp durum veya ihtiyaca göre hormon veya nöropeptidleri salgılayarak vücut fonksiyonlarını özelleşmiş hücrelerdir. Bunlar başlıca; beyinde hipotalamustan salgılanan oksitosin ve su metabolizmasında etkili antidiüretik hormon, pineal bezden salgılanan uyku ile ilgili olan melatonin, tiroid glandından salgılanan kalsiyum ve kemik metabolizmasını etkileyen kalsitonin, pankreas beta hücrelerinden salgılanan insülin hormonu, mide-barsak sisteminde gıda alımı ve sindirilmesiyle ilgili hormonlar, solunum sistemi ve böbrek üstü bezinden salınan epinefrindir. Bunlar ve daha birçoğu nöroendokrin hücrelerde sentezlenip salgılanırlar ve hedef organda fonksiyonlarını gösterirler.

Nöroendokrin tümörler, en sık ince barsaklar olmak üzere gastrointestinal traktustan kaynaklanırlar, bunu akciğerden ve pankreastan kaynaklanan nöroendokrin tümörler izler. Primeri bilinmeyen metastazla tanı konan nöroendokrin tümörler de tüm vakaların yaklaşık %15'ini oluşturur. Feokromositoma, paraganglioma, tiroid medüller kanseri ve hatta hipofiz adenomları da nöroendokrin tümör kapsamında yer alırlar.

Nöroendokrin tümörlerin semptomları bulundukları organa göre çok da özgül olmayan karın ağrısı, bulantı, kusma, halsizlik, öksürük, nefes darlığı, ses kısıklığı ve kilo kaybı semptomlar olmakla birlikte hormonal fazlalığa bağlı yüzde kızarma, ishal, hipoglisemi, hipertansif ataklar da olabilir.

Nöroendokrin tümörler hormonal sekresyon durumuna göre, köken aldıkları organa göre ve patolojik incelemelerde immünhistokimyasal bulgularına göre sınıflandırılırlar. Çoğunluğu iyi diferansiye tümörler olmak üzere yüksek dereceli kötü differensiye nöroendokrin tümörler şeklinde de olabilir. Tanı ve takipte kullanılan kromogranin A ve nöron spesifik enolaz genel kan belirteçleridir.

Nöroendokrin tümörlerin takip ve yönetimi endokrinoloji, onkoloji, cerrahi, gastroenteroloji, patoloji ve nükleer tıp bölümlerini içine alan bir ekip tarafından multidisipliner olarak yapılmalıdır.

Birçok hastalıkta olduğu gibi erken tanı ve tedavi hayat kurtarıcıdır. Nadir olması nedeniyle farkındalığın artması ve aile hekimlerinden başlayarak tüm hekimlerde bu bilincin oluşturulması oldukça önemlidir.

14 KASIM DÜNYA DİYABET GÜNÜ BASIN BİLDİRİSİ

14 Kasım Dünya Diyabet Gününde Diyabete Birlikte Dur Diyelim

1921 yılında insülini bulan Dr Banting'in doğum günü olan 14 Kasım, 2006 yılından beri resmi olarak Dünya Diyabet Günü olarak tanınmıştır. Her yıl 14 Kasım Dünya Diyabet Gününde diyabetin yani şeker hastalığının tanınması, tedavisi ve önlenmesi için farkındalık oluşturmak amacıyla dünyada ve ülkemizde çeşitli etkinlikler düzenlenmektedir.

İnsülin pankreasın beta hücrelerinden salgılanan bir hormondur ve kandaki şekerin hücre içine girmesini sağlar. Diyabet, insülin eksikliği, insülin direncine bağlı etki yetersizliği ya da her iki durumun bir arada bulunması sonucu gelişen kan şekeri yüksekliği ile seyreden bir hastalıktır.

Diyabetin dört farklı tipi vardır. Tip 1 diyabet genellikle 30 yaşın altında görülür. Vücutta hiç insülin üretilmez. Tip 2 diyabet en sık görülen diyabet tipidir. Genellikle 40 yaşından sonra görülür. Tip 2 diyabette insülin direnci nedeniyle var olan insülin yeterli etki gösteremez. Gestasyonel diyabet daha önceden diyabeti bulunmayan bir gebede, gebelik sırasında ortaya çıkan ve doğumla birlikte kaybolan diyabettir. Diğer nedenlere bağlı diyabette ise eşlik eden hastalıklar ve ilaç kullanımı gibi durumlara ikincil olarak şeker yüksekliği görülmektedir.

Diyabet tüm dünyada sıklığı giderek artan bir sağlık sorunudur. Dünyada her 10 erişkinden 1'i diyabetlidir. Ülkemizde 1997 yılında diyabet sıklığı %7.2 iken 2010 yılında yaklaşık iki kat artarak %13.7'ye ulaştığı görülmüştür ve artış devam etmektedir.

Diyabetin en sık görülen belirtileri ağız kuruluğu, çok su içme, çok ve sık idrar yapma, halsizlik, yorgunluk, sık acıkma, çok yemek yemeye rağmen kilo kaybı, ayaklarda, ellerde uyuşma, karıncalanma, deri ve idrar yolu enfeksiyonları, tekrarlayan mantar enfeksiyonları, yaraların geç iyileşmesi ve bulanık görmedir.

Açlık kan şekerinin 126 mg/dL veya üzerinde, herhangi bir zamanda ölçülen rastgele kan şekerinin 200 mg/dL veya üzerinde bulunması diyabet tanısı koydurur.

Kan glukozunda uzun süreli yükseklik insan vücudunda birçok sistem ve organın olumsuz etkilenmesine yol açar. Diyabetiklerde bu nedenle kalp ve damar hastalıkları, inme, görme bozuklukları, sinir ve böbrek hasarları, ayakta yara oluşması, gangren ve buna bağlı uzuv kayıpları görülebilir.

Sağlıklı beslenme, hareketli yaşam tarzı ve hekim tarafından önerilen ilaçların düzenli alınması kan şekerlerinin istenilen düzeyde tutulmasını sağlar. Tedavilerin doğru uygulanabilmesi için diyabet eğitimi çok önemlidir. İlaç tedavileri insülin dışı ilaçlar ve insülinler olmak üzere iki ana başlık altında toplanır. Tip 1 diyabetlilerde ve şeker düşürücü ilaca ihtiyacı olan gebelerde insülin tedavisi kullanılırken, tip 2 diyabette genellikle ağızdan alınan haplar ve insülin dışı enjeksiyon tedavileri yeterli olur. Gerekli durumlarda insülin de kullanılabilir.

Diyabeti kontrol altına almak için; belirtiler mutlaka öğrenilmeli, düzenli egzersiz yapılmalı, beslenmeye dikkat edilmeli, ilaç tedavileri düzenli olarak kullanılmalı, kan şekeri düzenli olarak kontrol edilmeli, tansiyon ya da kolesterol yüksekliklerı varsa kontrol altına alınmalı, kilo kontrolü sağlanmalı, sigaradan uzak durulmalı, ağız ve diş sağlığına dikkat edilmeli, yeterli su ve sıvı alımı sağlanmalıdır.

Uluslararası Diyabet Federasyonu 2023 yılı 14 Kasım Dünya Diyabet günü sloganında diyabetin risklerini bilmenin önemine dikkat çekmektedir. Diyabete dur diyebilmenin en etkin yolu hastalığı ve risklerini öğrenmek, hasta olarak sorumluluk üstlenerek sağlıklı olmak için hekimlerin önerileri doğrultusunda gerekeni yapmaktır.

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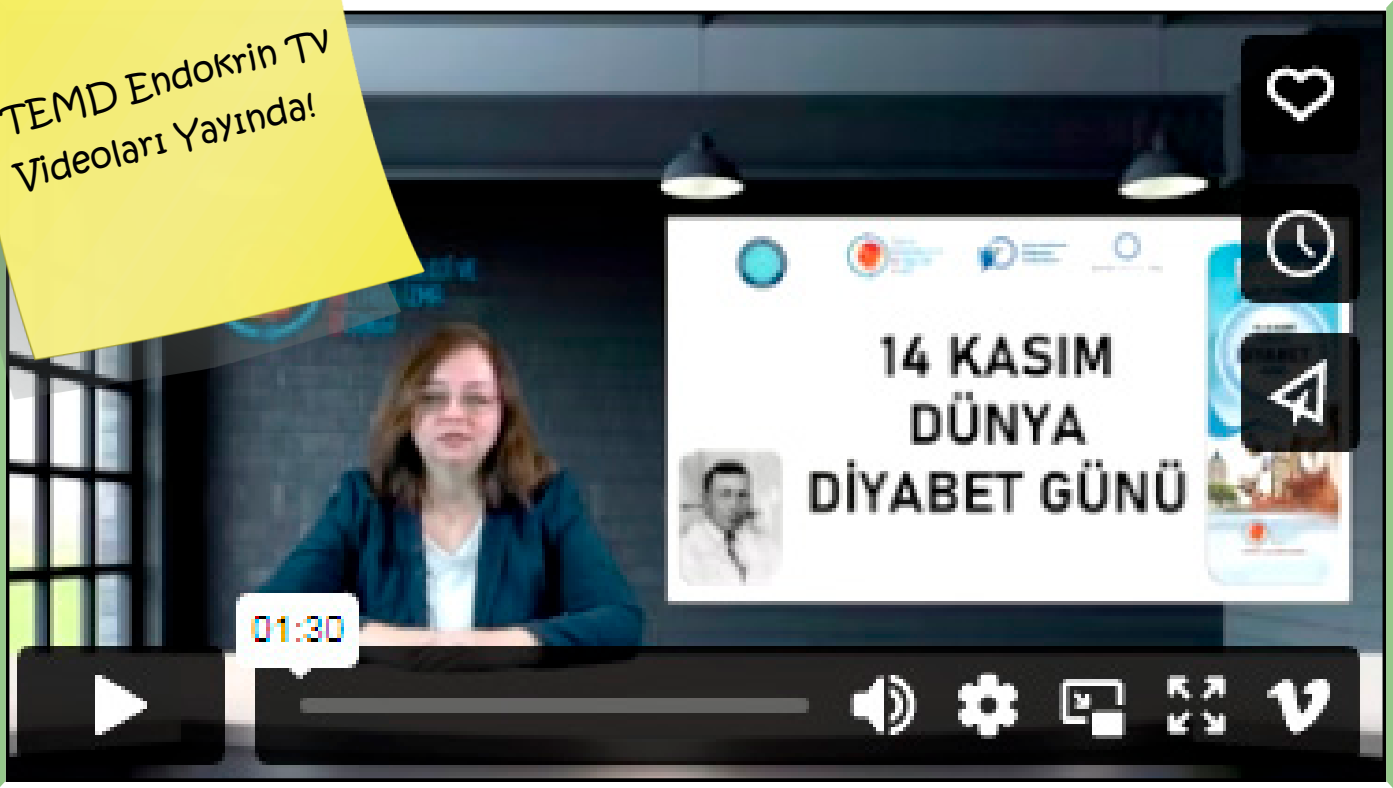

14 KASIM DÜNYA DİYABET GÜNÜ
Prof. Dr. Canan Ersoy

Hashimoto Hastalığı Hangi Sağlık Sorunlarına Yol Açar?
Prof. Dr. Mustafa Kulaksızoğlu

ULUSAL VE ULUSLARARASI BİLİMSEL KONGRE VE SEMPOZYUMLAR

- 24 Şubat 2024
  2. Tıbbi Beslenme ve Egzersiz Sempozyumu, Ankara
  https://www.temd.org.tr/etkinlikler/2-tibbi-beslenme-ve-egzersiz-sempozyumu

- 9 Mart 2024
  Tiroid USG Kursu, İstanbul
  https://www.temd.org.tr/etkinlikler/tiroid-usg-kursu

- 1-3 Mart 2024
  21st International Congress of Endocrinology (ICE 2024), Dubai, UAE
  https://icecongress.com/

- 11-14 Nisan 2024
  WCO-IOF-ESCEO, World Congress on Osteoporosis, Osteoarthritis and Musculoskeletal Diseases
  United Kingdom Hilton London Metropole, London
  https://www.wco-iof-esceo.org/

- 17-21 Nisan 2024
  45. Türkiye Endokrinoloji ve Metabolizma Hastalıkları Kongresi, Antalya
  https://www.temhk.org/

- 11-14 Mayıs 2024
  26th European Congress of Endocrinology - ECE 2024, Stokholm, Sweden
  https://www.ese-hormones.org/events-deadlines/european-congress-of-endocrinology/ece-2024/

- 1-4 Haziran 2024
  ENDO 2023, Annual Meeting of the Endocrine Society, Boston, MA
  https://www.endocrine.org/meetings-and-events/endo-2024/general-information

- 21-24 Haziran 2024
  83th ADA Scientific Sessions, Orlando, FL.
  https://professional.diabetes.org/scientific-sessions

- 9-13 Eylül 2024
  59th Annual Meeting - European Association for the Study of the Diabetes, Madrid, Spain
  https://www.easd.org/annual-meeting/easd-2024.html

- 17-20 Ekim 2024
  Endobridge 2024
  Cornelia Diamond Congress Center
  https://www.endobridge.org/

- 31 Ekim-3 Kasım 2024
  Mezuniyet Sonrası Eğitim Kursu - ENDOKURS-8
  Double Tree By Hilton, Şanlıurfa
  http://www.temdendokurs.org/

ÜYELERİMİZDEN LİTERATÜR SEÇMELERİ

Capillary Microarchitectural Changes are Independent of Disease Activity in Acromegaly

Tugce Apaydin, Yasemin Yalcinkaya, Can Ilgin, Dilek Gogas Yavuz

Microvasc Res. 2023 Jan:145:104444. doi: 10.1016/j.mvr.2022.104444. Epub 2022 Oct 5. PMID: 36208671 DOI: 10.1016/j.mvr.2022.104444

Objective: Although atherosclerosis-related macrovascular complications are well known in acromegaly, studies on endothelial function and arteriolar level are contradictory. In order to test the hypothesis, microvascular changes associated with macrovascular changes in acromegaly, we aimed to evaluate microvascular changes in nailfold capillaries and carotid intima-media thickness (CIMT) in patients with acromegaly.

Design: In this cross-sectional observation study, of total 70 patients with acromegaly [ten (14.3 %) were active acromegaly (AA), 60 (85.7 %) were controlled acromegaly (CA)] and 74 healthy controls were enrolled. Microvascular structure was evaluated using the nailfold video capillaroscopy, and CIMT was measured using ultrasonography.

Results: The median number of capillaries was less [10 no./mm (min-max: 5-16) vs. 11 no./mm (min-max: 9-15); p = 0.001] in the acromegaly group than in the controls. Capillaries below 6-8 per/mm was more common in the acromegaly patients [six (8.6 %) vs. one (1.4 %); p = 0.046]. All capillaroscopic parameters were similar among the patients with CA or AA. CIMT levels were higher in the acromegaly group than in the control group [0.60 mm (0.43-0.86) vs. 0.38 mm (0.27-0.59); p < 0.001], and AA patients had higher CIMT than CA patients (p = 0.037). None of the clinical or laboratory parameters including growth hormone and IGF-1 were related to capillaroscopic parameters or CIMT.

Conclusion: Decreased capillary number was the major capillaroscopic finding in acromegaly and there was no significant difference between active and controlled cases, but CIMT was found to be higher in the active group. Increased CIMT levels in acromegaly were not associated with capillary changes. Large-scale, prospective studies are needed to make a definite conclusion about the effect of the disease activity on nailfold capillaries and its association with macrovascular changes.

Analysis of Interleukin-17, Interleukin-23, Neopterin and Nesfatin-1 Levels in The Sera of Hashimoto Patients

Nihayet Bayraktar, Mehmet Ali Eren, Mustafa Bayraktar, Ali Öztürk, Hamza Erdoğdu

J Med Biochem. 2023 Aug 25;42(3):460-468. doi: 10.5937/jomb0-40683. PMID: 37790207 PMCID: PMC10542705 DOI: 10.5937/jomb0-40683

Background: Hashimoto's thyroiditis (HT) is an autoimmune disorder affecting the thyroid gland and may present as goiter or atrophic thyroiditis that may result in various metabolic and inflammatory disorders. The aim of this study is to determine the changes in serum levels of interleukin-17 (IL-17), IL-23, neopterin, and nesfatin-1 parameters in HT patients and to evaluate the possible relationship among these parameters.

Methods: 90 HT patients and 30 healthy individuals were included in this study. Demographic data of the patients included in the study were recorded and detailed physical examinations were performed. IL-17, IL-23, neopterin, and nesfatin-1 levels were measured in the serum samples of the participants by the ELISA method.

Evaluation of Adrenal Reserve in Patients with Differentiated Thyroid Cancer Receiving Thyroid Hormone Suppression Therapy- case-control Comparative Study

Muhammet Cuneyt Bilginer, Abbas Ali Tam, Sevgul Faki, Nagihan Bestepe, Fatma Dilek Dellal, Didem Ozdemir, Oya Topaloglu, Reyhan Ersoy, Bekir Cakir

Endocr Res. 2023 Feb;48(1):9-15. doi: 10.1080/07435800.2022.2158338. Epub 2022 Dec 16.PMID: 36524715 DOI: 10.1080/07435800.2022.2158338

Background: Patients with differentiated thyroid cancer (DTC) are exposed to subclinical exogenous hyperthyroidism for the suppression of thyroid-stimulating hormone (TSH). In this study, we aimed to evaluate the adrenal reserve in DTC patients receiving suppression therapy.

Materials and methods: The study included 55 DTC patients on suppression therapy and 32 healthy volunteers. Basal serum cortisol of all participants and adrenocorticotropic hormone (ACTH) of the patient group were measured. A standard-dose ACTH test (0.25 mg) was performed in patients with a basal cortisol <14.5 mcg/dL.

Results: In the patient group, TSH was lower, free thyroxine (fT4) was higher, and free triiodothyronine (fT3) was similar to those of the control group (p < .01, p < .01, p = .140, respectively). The serum cortisol of the patient group was significantly lower than the control group (12.14 ± 5.12 mcg/dL vs 18.00 ± 5.56 mcg/dL, p < .001). A total of 34 (61.8%) patients with DTC had a basal cortisol <14.5 mcg/dL. Prolonged TSH suppression (≥5 years vs <5 years) was associated with lower basal cortisol (7.46 ± 2.63 mcg/dL vs

9.48 ± 2.65 mcg/dL, p = .022). The ACTH stimulation test showed that 2 (5.8%) patients had a cortisol response <18 mcg/dL. The rate of adrenal insufficiency was 3.6% in DTC patients. A moderate negative correlation was found between ACTH and fT3 of patients with low basal cortisol (r = -0.358, p = .038).

Conclusion: Patients with DTC receiving TSH suppression therapy are at risk for adrenal insufficiency. The duration and severity of suppression might increase this possibility. Dynamic testing with synthetic ACTH can be used to reveal insufficient cortisol response in case of clinical suspicion.

Telemedicine as a Motivational Tool to Optimize Metabolic Control in Patients with Diabetes in Turkey: A Prospective, Randomized, Controlled TeleDiab Trial

Fulya Calikoglu, Elif Bagdemir, Selda Celik, Cemile Idiz, Haluk Ozsarı, Halim Issever, Ilhan Satman

Telemed J E Health. 2023 Apr;29(4):518-530. doi: 10.1089/tmj.2022.0028. Epub 2022 Sep 2. PMID: 36067018 DOI: 10.1089/tmj.2022.0028

Introduction: Telemedicine is a follow-up system that can improve the quality of management and cost-effectiveness of rapidly increasing diabetes patients.

Methods: Two hundred adult patients with diabetes were enrolled in this prospective, randomized study. Consecutive patients were divided equally into two groups. Both groups received routine care visits quarterly. TeleDiab group also sent self-monitoring of blood glucose data and received short message service over the transmission system for 12 months. After the study was completed, all patients continued their routine care visits, and their data were evaluated for another 12 months. Six years after the initial study, patients were contacted by phone during the Covid-19 lockdown, and their status was assessed.

Results: At the end of the study, glycemic control, kidney function, and lipid parameters of the TeleDiab group were statistically significantly better than the Usual Care group. There was no significant change in the weights of the patients. It was observed that this state of wellbeing continued both at the end of the second year and during the Covid-19 lockdown. Individuals with type 2 diabetes were found to benefit more from telemedicine.

Discussion: It has been beneficial to guide patients with applications such as TeleDiab in diseases such as diabetes that require lifelong follow-up. On the other hand, the importance of telemedicine programs in the management of chronic diseases in the current pandemic conditions has come to the fore even more. Telemedicine is an effective motivational tool to ensure optimal control not only of glycemic but also of kidney and lipid parameters.

Evaluation of Subclinical Atherosclerosis in Obese Patients with Three Noninvasive Methods: Arterial Stiffness, Carotid Intima-Media Thickness, and Biomarkers of Endothelial Dysfunction

Mustafa Can, Muhammet Kocabas, Zeliha Yarar, Hatice Çalışkan Burgucu, Melia Karaköse, Fatma Hümeyra Yerlikaya, Kültigin Türkmen, Mustafa Kulaksızoğlu, Feridun Karakurt

Arch Endocrinol Metab. 2023 May 12;67(4):e000622. doi: 10.20945/2359-3997000000622. PMID: 37252704 PMCID: PMC10665069 DOI: 10.20945/2359-3997000000622

Objective: In this study, we aimed to evaluate subclinical atherosclerosis in patients with obesity who had cardiovascular disease risk indicators such as arterial stiffness, which is evaluated using pulse wave velocity (PWV), carotid intima-media thickness (CIMT), and biomarkers of endothelial dysfunction such as endocan, ADAMTS97, and ADAMTS9.

Subjects and methods: Sixty obese subjects, including 23 subjects with body mass index (BMI) ≥ 40, 37 subjects with BMI ≥ 30 but < 40, and 60 age-and sex-matched control subjects, were included in our study. Serum endocan, ADAMTS97, and ADAMTS9 levels as well as PWV and CIMT measurements of the subjects in the obese and control groups were performed.

Results: In the obesity group, PWV levels were significantly higher than they were in the control group and endocan levels were significantly lower than they were in the control group. When we compared the obese group with BMI ≥ 40 and the control group, the BMI ≥ 40 group had significantly higher PWV and CIMT levels than the control group had, whereas endocan, ADAMTS7, and ADAMTS9 levels were similar to those of the control group. When we compared the obese group with BMI ≥ 30 < 40 to the control group, endocan levels were lower in the group with BMI ≥30 < 40, and PWV and CIMT levels were similar to the control group.

Conclusion: We found that arterial stiffness and CIMT increased in obese patients with BMI ≥ 40 and that increased arterial stiffness was associated with age, systolic blood pressure, and HBA1C. In addition, we found that the endocan levels were lower in obese patients than they were in nonobese control individuals.

Expression of The Angiogenesis Markers Endocan in Cushing's Syndrome Due to Cortisol Producing Adenoma

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Purpose: In this study, we aimed to investigate the endocan expression in tissue samples of patients diagnosed with Cushing's syndrome (CS) due to Cortisol-Producing-Adenoma (CPA) and compare it with normal adrenal cortex tissue, and also to evaluate the correlations of endocan expression with clinical and histopathological features.

Methods: 11 patients who were operated for CS due to CPA between 2009-2021 and 14 control subjects with normal adrenal cortex were included in the study. Demographic, laboratory and clinicopathological data of the patients were recorded. Sections of 4-5 μm thickness were taken from paraffin blocks of patients diagnosed with CS due to CPA and control subjects with normal adrenal cortex tissue. The sections were then stained in a closed system automatic immunohistochemical staining device to perform immunohistochemical analysis. The endocan positive grade were determined based on the proportion of stained cells on a scale of negative to strong.

Results: The number of subjects with positive endocan expression and the mean endocan expression level in the CS group were significantly higher than the control group ($p = 0.005$, $p < 0.001$, respectively). No correlation was found between endocan expression and clinical and histopathological features.

Conclusion: According to the results of our study, endocan overexpression in CPA tissues may be related to the hormonal functionality of CPA.

Evaluation of Nrg4 and Thiol/Disulfide Homeostasis in Patients With GDM

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Background: In this study, we aimed to evaluate the role of neuregulin4 (Nrg4) in the etiopathogenesis of gestational diabetes mellitus (GDM) and thiol/disulfide homeostasis as an indicator of oxidative stress.

Methods: This prospective, case-control study included 34 women with diabetes and 34 healthy pregnant women who applied between January 2017 and January 2020. Levels of native and total thiol, disulfide and Nrg4 were measured in both diabetes mellitus and healthy pregnant groups.

Results: When compared to the control group, the serum neuregulin4 levels in the diabetes group were considerably lower (3.22 ± 2.16 vs. 4.55 ± 0.96, $p < 0.001$). Native thiol (292.67 ± 43.65 vs. 366.40 ± 51.28; $p < 0.001$), total thiol (388.60 ± 46.60 vs. 414.52 ± 54.19; $p < 0.001$) levels and native thiol/total thiol ratio (75.51 ± 8.95 vs. 88.35 ± 3.54; $p < 0.001$) were lower in diabetes group compared to control group. Disulfide level (47.96 ± 19.52 vs. 24.06 ± 7.69) and disulfide/native thiol (17.13 ± 8.03, vs. 6.67 ± 2.30) and disulfide/total thiol (12.24 ± 4.47 vs. 5.82 ± 1.77) ratios were higher in diabetes group (all $p < 0.001$).

Conclusions: We suggested that decreased Nrg4 level and impaired oxidative stress parameters may be related with the increased risk of diabetes. However, we did not found a correlation between the Nrg4 and oxidative stress parameters.

Could the Systemic Immune Inflammation Index Predict Diagnosis, Recovery Time, Hypothyroidism, and Recurrence Rates in Subacute Thyroiditis?

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Purpose: Subacute thyroiditis (SAT) is a non-infectious inflammatory disease of the thyroid. The Systemic Immune-Inflammation Index (SII), also known as an easy economical marker, correlates with the severity of inflammatory responses. We aimed to evaluate the clinical significance of the SII and to compare it to other inflammatory markers in terms of diagnosis, recovery time, and recurrence of SAT.

Patients and methods: The current non-interventional observational prospective study was performed at Outpatient Department of Endocrinology, Erzurum Training and Research Hospital. Sixty-nine patients with SAT and fifty-nine healthy individuals in total were enrolled in our study. The follow-up period was 6-12 months for all patients regarding treatment response, recurrence, and hypothyroidism.

Results: The SII level was found to be significantly higher at the time of diagnosis in the SAT group compared to the control group ($p=0.000$). There was a significant positive correlation between the SII and SAT recovery time ($p=0.000$), particularly in patients receiving methyl prednisolone treatment ($p=0.002$). SII was not found to be significantly associated with hypothyroidism and recurrence in patients with SAT ($p=0.261$, $p=0.568$). However, compared to the ones without recurrence, thyroid stimulating hormone (TSH) and erythrocyte sedimentation rate levels at the time of diagnosis were found to be higher in those patients with recurrence ($p=0.035$, $p=0.046$).

Conclusion: SII is a low-cost, widely available, universal indicator of inflammatory processes in SAT. It could provide many benefits in the follow-up process and the selection of aggressive anti-inflammatory treatment by estimating recovery time. SII, as a practical biomarker, may be a new diagnostic and prognostic tool for SAT.

Investigation of Obesity-Related HAdV-36 in NAFLD Patients: a Case-Control Study

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Background: HAdV-36 leads to adipocyte proliferation of adipose tissue through E4orf1 gene, leading to the development of obesity and related diseases. We aimed to investigate the presence and any association of HAdV-36 in non-alcoholic fatty liver disease (NAFLD) patients Methods: The patient group was composed of 116 patients; 30 obese patients with NAFLD (BMI > 30 kg/m2), 30 patients with Diabetes Mellitus (DM)+NAFLD (BMI > 30 kg/m2), 16 patients with NAFLD (BMI < 30 kg/m2), and operated obese group with NAFLD (BMI > 30 kg/m2). The control group comprised 81 non-obese healthy adults. Liver adipose tissue samples were obtained in 30 operated NAFLD patients. HAdV-36-DNA, HAdV-36 neutralizing antibodies, serum lipid, and adipokine levels were analyzed.

Results: HAdV-36 neutralizing antibodies (HAdV-36 Ab-positive) were detected in 10/116 and 2/81 participants in the study and control groups, respectively; the difference was statistically significant ($p < 0.005$). LDL, total cholesterol but not adipokine levels were found to be significantly higher in HadV-36 Ab-positive patients ($p < 0.05$). While HAdV-36 was identified as a risk factor with OR = 4.11 in univariate analyses, there was no significant difference in binary logistic regression analysis. HAdV-36-DNA was detected in the adipose tissue samples of two patients.

Conclusions: We suggest that the presence of HAdV-36 may lead to the development of obesity with the increase in adipose tissue, and diseases such as hyperlipidemia, NAFLD, DM, and metabolic syndrome may develop on the basis of chronic inflammation caused by obesity. Thus, HAdV-36 may be a plausible risk factor for the development of NAFLD.

Interobserver and Intraobserver Reliability in Sonoelastographic Assessment of Thyroid Nodules

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Ultrasound Q. 2023 Mar 1;39(1):53-60. doi: 10.1097/RUQ.0000000000000616. Epub 2022 Aug 3. PMID: 35943395 DOI: 10.1097/RUQ.0000000000000616

Background: Thyroid ultrasonography is the first and perhaps most fundamental step for the radiological distinction of benign and malignant nodules. In this study, 2 radiologists reviewed the sonoelastographic and Doppler images of thyroid nodules and evaluated for the intraobserver and interobserver reliability.

Purpose: We aimed to determine confusing nodule identifiers and sonographic features differently defined by observers.

Methods: A total of 157 nodules in 91 patients (male/female, 72:19) with ages ranging from 18 to 72 years old were included in the study. Ultrasonographic images and video clips of the nodules were obtained and presented to 2 reviewers unaware of the cytopathology results. Two observers defined the characteristics of the nodules based on previously determined criteria. Then, intraobserver and interobserver correlation coefficients were calculated for each subcategory.

Results: In the grayscale ultrasonographic examination, varying degrees from low to high interobserver correlation coefficients were obtained for different subcategories (between $\kappa = 0.359$ and $\kappa = 0.821$). In color Doppler examination, we obtained medium correlation coefficients ($\kappa = 0.493$ and $\kappa = 0.553$). On the other hand, there was a high correlation coefficient in tissue compression elastography ($\kappa = 0.617$ and $\kappa = 0.638$).According to our study results, elastographic pattern, shape of the nodule, presence of echogenic foci, and pathological lymph nodes are better predictors to determine the malignant potential of thyroid nodule with higher interobserver correlation. Therefore, these criteria may be used primarily for the evaluation of thyroid nodules. The intraobserver correlation coefficient was higher in the practitioner with longer experience, suggesting the importance of professional practice period on the decision-making process.

Reduction in the Risk of Peripheral Neuropathy and Lower Decrease in Kidney Function with Metformin, Linagliptin or Their Fixed-Dose Combination Compared to Placebo in Prediabetes: A Randomized Controlled Trial

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Objective: To compare the effect of glucose-lowering drugs on peripheral nerve and kidney function in prediabetes.

Methods: Multicenter, randomized, placebo-controlled trial in 658 adults with prediabetes treated for 1 year with metformin, linagliptin, their combination or placebo. Endpoints are small fiber peripheral neuropathy (SFPN) risk estimated by foot electrochemical skin conductance (FESC < 70 μSiemens) and estimated glomerular filtration rate (eGFR).

Results: Compared to the placebo, the proportion of SFPN was reduced by 25.1% (95% CI:16.3-33.9) with metformin alone, by 17.3% (95% CI 7.4-27.2) with linagliptin alone, and by 19.5% (95% CI 10.1-29.0) with the combination linagliptin/metformin ($p < 0.0001$ for all comparisons). eGFR remained +3.3 mL/min (95% CI: 0.38-6.22) higher with the combination linagliptin/metformin than with the placebo ($p = 0.03$). Fasting plasma glucose (FPG) decreased more with metformin monotherapy -0.3 mmol/L (95%CI: -0.48; 0.12, $p = 0.0009$) and with the combination metformin/linagliptin -0.2 mmol/L (95% CI: -0.37; -0.03) than with the placebo ($p = 0.0219$). Body weight (BW) decreased by -2.0 kg (95% CI: -5.65; -1.65, $p = 0.0006$) with metformin monotherapy, and by -1.9 kg (95% CI: -3.02; -0.97) with the combination metformin/linagliptin as compared to the placebo ($p = 0.0002$).

Conclusions: in people with prediabetes, a 1 year treatment with metformin and linagliptin, combined or in monotherapy, was associated with a lower risk of SFPN, and with a lower decrease in eGFR, than treatment with placebo.

Advances in the Pharmacological Management of Diabetic Nephropathy: A 2022 International Update

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Diabetic nephropathy (DN) is the leading cause of end-stage renal disease (ESRD) worldwide. Its pathogenesis encompasses functional alterations involving elevated intraglomerular and systemic pressure, increased activity of the renin-angiotensin system (RAS) and oxidative stress, and the eventual development of renal fibrosis. The management of DN involves the optimization of blood pressure (BP) and blood glucose targets. However, treatment of these risk factors slows down but does not stop the progression of DN. Innovative pharmacologic therapies for dyslipidemia and type 2 diabetes mellitus (T2DM) could play a key role in bridging this gap and attenuating the residual risk of DN beyond traditional risk factor management. Glucagon-like peptide-1 receptor agonists (GLP-1 RAs), sodium-glucose cotransporter-2 inhibitors (SGLT-2is), and inhibitors of mineralocorticoid receptor-mediated sodium reabsorption are recently introduced drug classes that have been shown to have positive effects on kidney function in individuals with T2DM. The aim of this review is to provide an update on the therapeutic options available in order to prevent or slow the onset and progression of DN in diabetic patients.

The Assessment of Neuropathic Pain in Patients with Prediabetes

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Aims: Neuropathic pain is associated with several clinical conditions, including anxiety, depression, sleep disorders, and decreased quality of life; however, less evaluated in prediabetes. This study aims to assess neuropathic pain through validated diagnostic tools in prediabetes.

Methods: One hundred and seventy-two patients with prediabetes and 170 controls were included in this cross-sectional study. The Leeds Assessment of Neuropathic Symptoms and Signs (LANSS) Pain Scale and Douleur Neuropathique 4 Questions (DN4) were used to evaluate neuropathic pain. The Visual Analog Scale (VAS) was used to estimate pain intensity.

Results: Twenty-three (13.4%) and 12 (7%) patients with prediabetes were diagnosed with neuropathic pain using DN4 and LANSS questionnaires, respectively. Neuropathic pain rates of the patients were higher than controls with two pain scales ($p < 0.001$). VAS scores were higher in prediabetes group than in controls ($p = 0.021$). LANSS, DN4, and VAS scores were positively correlated with HbA1c level ($r = 0.184$, $p = 0.016$; $r = 0.180$, $p = 0.018$; $r = 0.188$, $p = 0.014$,

respectively). LANNS and DN4 scores were higher in female patients than in males ($p < 0.001$).

Conclusions: Neuropathic pain was increased in prediabetes by DN4 and LANNS questionnaires. An appropriate diagnosis of neuropathic pain in prediabetes may prevent patients from different pain-related clinical conditions.

Visceral Adiposity Index as an Indicator of Cardiometabolic Risk in Patients with Congenital Adrenal Hyperplasia

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Aim: To evaluate the cardiometabolic risk in patients with CAH (21 (OH) enzyme deficiency) on the basis of the visceral adiposity index (VAI), which indicates dysfunction of the visceral adipose tissue (VAT).

Materials and Methods: A total of 41 patients and 38 body mass index (BMI), age, and gender-matched healthy controls (HC) were included. The patients' and HCs' age, gender, waist circumference (WC), BMI information and total cholesterol (TC), high-density lipoprotein (HDL), triglyceride (TG) values, smoking, and medication history were obtained from medical charts. Weight, height, WC, and blood pressure levels were measured. Patients' and HCs' BMI, Framingham risk scores (FRS), VAI and Ferriman-Gallwey scores were calculated. The patients' and HCs' age, gender TC, HDL, and TG, androstenedione, dehydroepiandrosterone sulfate ($DHEASO_4$), 17 hydroxyprogesterone (17(OH)P) values, smoking, and medication history were obtained from medical charts. Body fat and muscle mass levels were measured with Tanita T 6360.

Results: Gender distribution, mean age, and BMI of patients with CAH were 34/7, 30 ± 8, 27 ± 5.4; HC subjects 30/8, 30 ± 6, 27 ± 3.8 (P = 0.9, 0.6, 0.9, respectively). The VAI values of patients with a diagnosis of CAH 3.7 (2.3-6.9) were found to be significantly higher than those of HC patients 2.5 (1.8-3.9; P = 0.02). The mean glucocorticoid doses of the patients were 17 ± 9 mg/day. The glucocorticoid dose level was determined as independent risk factor on the FRS (P = 0.03, β = 0.04) and VAI (P = 0.018, β = 0.17).

Conclusion: Glucocorticoid dose optimization should be done more carefully to improve metabolic and cardiovascular outcomes in CAH patients.

The Effect of Ramadan Fasting on Serum Osmolality in Diabetic Patients

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Objective: To observe the changes of osmolarity levels due to fasting in Ramadan among type 2 diabetic patients.

Methods: The observational study was conducted from May 16 to June 3, 2019, at the Istanbul Medeniyet University, Istanbul, Turkey, and comprised adult type 2 diabetic patients of either gender visiting the diabetes outpatient clinics during the holy month of Ramadan. Those fasting were placed in Group A, while those not fasting formed Group B. Anthropometric measurements and medications in use were recorded. Blood samples were taken in the morning and before the evening meal. Serum osmolality was calculated using serum levels of sodium, glucose and blood urea nitrogen. Data was analysed using SPSS 16.

Results: Of the 52 patients, 27(52%) were in Group A and 25(48%) were in Group B. Overall, there were 22(42%) females and 30(58%) males. The mean morning serum osmolalities of the two groups were not different ($p>0.05$). The mean evening serum osmolality was not significantly different than the mean morning osmolality in Group A ($p=0.22$). In Group B, the mean evening serum osmolality was significantly lower than the mean morning osmolality ($p=0.004$). No significant difference was found between mean morning and evening serum osmolalities of those taking sodium-glucose cotransporter 2 ($p>0.05$).

Conclusions: There was no biochemical sign of dehydration with Ramadan fasting in type 2 diabetes mellitus patients.

Real-Time Detection of Acromegaly From Facial Images with Artificial Intelligence

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Objective: Despite improvements in diagnostic methods, acromegaly is still a late-diagnosed disease. In this study, it was aimed to automatically recognize acromegaly disease from facial images by using deep learning methods and to facilitate the detection of the disease.

Design: Cross-sectional, single-centre study.

Methods: The study included 77 acromegaly (52.56 ± 11.74, 34 males/43 females) patients and 71 healthy controls (48.47 ± 8.91, 39 males/32 females), considering gender and age compatibility. At the time of the photography, 56/77 (73%) of the acromegaly patients were in remission. Normalized images were obtained by scaling, aligning, and cropping video frames. Three architectures named ResNet50, DenseNet121, and InceptionV3 were used for

the transfer learning-based convolutional neural network (CNN) model developed to classify face images as "Healthy" or "Acromegaly". Additionally, we trained and integrated these CNN machine learning methods to create an Ensemble Method (EM) for facial detection of acromegaly.

Results: The positive predictive values obtained for acromegaly with the ResNet50, DenseNet121, InceptionV3, and EM were calculated as 0.958, 0.965, 0.962, and 0.997, respectively. The average sensitivity, specificity, precision, and correlation coefficient values calculated for each of the ResNet50, DenseNet121, and InceptionV3 models are quite close. On the other hand, EM outperformed these three CNN architectures and provided the best overall performance in terms of sensitivity, specificity, accuracy, and precision as 0.997, 0.997, 0.997, and 0.998, respectively.

Conclusions: The present study provided evidence that the proposed AcroEnsemble Model might detect acromegaly from facial images with high performance. This highlights that artificial intelligence programs are promising methods for detecting acromegaly in the future.

Radioprotective Effects of α2-Adrenergic Receptor Agonist Dexmedetomidine on X-ray Irradiation-Induced Pancreatic Islet Cell Damage

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Naunyn Schmiedebergs Arch Pharmacol. 2023 Aug;396(8):1827-1836. doi: 10.1007/s00210-023-02454-0. Epub 2023 Mar 6. PMID: 36877270 DOI: 10.1007/s00210-023-02454-0

Comprehensive epidemiological analyses conducted in the last 30 years have revealed a link between radiation and DM. We aimed to determine the effects of dexmedetomidine pretreatment on radiation-induced pancreatic islet cell damage. Twenty-four rats were divided into three groups: group 1 (control group), group 2 (only X-ray irradiation group), and group 3 (X-ray irradiation + dexmedetomidine). We observed necrotic cells with vacuoles accompanying loss of cytoplasm in the islets of Langerhans, extensive edematous areas, and vascular congestions in group 2. In group 3, we observed a decrease in necrotic cells in the islets of Langerhans, and edematous areas and vascular congestion was also reduced. We determined a decrease in β-cells, α-cells, and D-cells in the islets of Langerhans in group 2 compared to the control group. In group 3, β-cells, α-cells, and D-cells were elevated compared to group 2. Ionizing radiation may induce DM. Dexmedetomidine appears to exert a radioprotective effect.

Obstacles and Expectations of Rare Disease Patients and Their Families in Türkiye: ISTisNA Project Survey Results

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Rare disease patients constitute a significant part of the healthcare system of all countries. However, the information on the experiences during disease processes and daily life of rare disease patients is still limited. So far, there is a small number of studies conducted in Türkiye, and they mainly cover specific issues like education or anxiety. Here we present a comprehensive survey analysis conducted among the patients and their families within the scope of the Istanbul Solution Platform for Undiagnosed and Rare Diseases-ISTisNA project. A total of 498 individuals responded to the survey, and 58% of the participants answered all questions. The majority of the patients were in the age range of 1-10 years (44.7%), and 91% of all the patients had a precise diagnosis. The diagnosis rate in the first 6 months was 69%, and almost 10% of the patients remained undiagnosed. The mothers were the primary caregivers (72%). Nearly 30% of the caregivers had to quit their jobs and 25% of the patients (0-18 years) had to leave school. Accessing physicians with relevant specialization and reaching treatments/medications/supplements were the two main obstacles the participants mentioned, with a frequency of 81% and 73%, respectively. Around 50% of participants noted that they commonly faced difficulties at work/school and in their social lives. The highest expectation or priority was the establishment of rare disease-specific diagnosis and treatment centers, accurate and detailed information on diseases in the Turkish language, and easy access to physicians, treatments, and supportive therapies. To the best of our knowledge, this is the most comprehensive survey conducted on the rare disease community in Türkiye. These results show that regardless of the country, the individuals affected by rare diseases and their families have similar problems and expectations. On the other hand, regional and country-specific issues are still in the line to be solved. These studies can provide a deeper insight into rare diseases and guide the activities of Türkiye's national rare disease action plan.

Endocrine Disorders and COVID-19

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The multifaceted interaction between coronavirus disease 2019 (COVID-19) and the endocrine system has been a major area of scientific research over the past two years. While common endocrine/metabolic disorders such as obesity and diabetes have been recognized among significant risk factors for COVID-19 severity, several endocrine organs were identified to be targeted by severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2). New-onset endocrine disorders related to COVID-19 were reported while long-term effects, if any, are yet to be determined. Meanwhile, the "stay home" measures during the pandemic caused interruption in the care of patients with pre-existing endocrine disorders and may have impeded the diagnosis and treatment of new ones. This review aims to outline this complex interaction between COVID-19 and endocrine disorders by synthesizing the current scientific knowledge obtained from clinical and pathophysiological studies, and to emphasize considerations for future research.

The Effects of Dexmedetomidine on Early Acute Kidney Injury in Severely Burned Rats

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Objective: Burns are a global medical and economic problem. In addition to high costs, the lengthy therapeutic process and the emotional trauma experienced by patients and their families indirectly worsen the socioeconomic damage caused. Kidney failure observed after burns is highly correlated with mortality.

Materials and methods: Twenty-eight male Sprague-Dawley rats (age four months, weight 250-350 g) were included in the study. They were randomly assigned into four groups consisting of seven rats each with similar mean weights. Group 1 (n=7) represented the healthy control group (C), Group 2 (n=7) the Sham+dexmedetomidine (DEX) 100 mcg/kg (three doses) (S+DEX100) group, Group 3 (n=7) the 30% Burn (B), and Group 4 (n=7) the 30% Burn+DEX 100 mcg/kg/day group (B+DEX100) (three doses). Thiobarbituric acid reactive substances (TBARS), total thiol (TT), interleukin-1 (IL-1) and tumor necrosis factor-α (TNF-α) values in kidney tissues were investigated biochemically, and histopathological analyses were also performed. Nuclear factor κB (NF-κB)/p65 was measured using immunohistochemistry, and the TUNEL assay was applied to indicate apoptotic tubular epithelial cells.

Results: TBARS, IL-1, and TNF-α in kidney tissues decreased in the B+DEX100 group compared to the 30% burn group, while total thiol values increased. Histopathologically, atypical glomeruli, particularly necrotic tubules, and inflammation in peritubular areas decreased in the B+DEX100 group compared to the 30% burn group. In addition, apoptotic tubular epithelial cells exhibiting TUNEL positivity and tubular epithelial cells exhibiting NF-κβ/p65 positivity also decreased in the B+DEX100 group compared to the 30% burn group.

Conclusions: Dexmedetomidine reduced apoptotic activity in rats and exhibited anti-inflammatory antioxidant effects in the burn model in this study.

Stemness Potency and Structural Characteristics of Thyroid Cancer Cell Lines

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Background: Thyroid cancer is the most frequent type of endocrine malignancy. Thyroid carcinomas are derived from the follicular epithelium and classified as papillary (PTC) (85%), follicular (FTC) (12%), and anaplastic (ATC) (<3%). Thyroid cancer could arise from thyroid cancer stem-like cells (CSCs). CSCs are cancer cells that feature stem-like properties. Kruppel-like factor (KLF4) and Stage-spesific embryonic antigen 1 (SSEA-1) are types of stem cell markers. Filamentous actin (F-actin) is an essential part of the cellular cytoskeleton. The purpose of this study was to evaluate the stem cell potency and the spatial distribution of the cytoskeletal element F-actin in PTC, FTC, and ATC cell lines.

Materials and methods: Normal thyroid cell line (NTC) Nthy-ori-3-1, PTC cell line BCPAP, FTC cell line FTC-133 and ATC cell line 8505c were stained with SSEA-1 and KLF4 for stem cell potency and F-actin for cytoskeleton. The morphological properties of cells were assessed by a scanning electron microscope (SEM) and elemental ratios were compared with EDS.

Results: PTCs had greater percentages of SSEA-1 and KLF4 protein intensity (0.32% and 0.49%, respectively) than NTCs. ATCs had a greater proportion of KLF4 expression (0.8%) than NTCs. NTCs and FTCs had increased F-actin intensity across the cell, but PTCs had the lowest among these four cell lines. NTCs and PTCs, as well as NTCs and FTCs, have statistically identical aspect ratios and round values. These values, however, were statistically different in ATCs.

Conclusion: The study of stem cell markers and the cytoskeletal element F-actin in cancer and normal thyroid cell lines may assist in the identification of new therapeutic targets and contribute in the understanding of treatment resistance mechanisms.

The Expression of HDAC9 and P300 in Papillary Thyroid Carcinoma Cell Line

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Purpose: Papillary thyroid carcinoma (PTC) is the most common type of thyroid cancer and accounts for 85-90% of all thyroid cancers. Metastatic differentiated thyroid cancer, radioiodine-refractory thyroid cancer, and anaplastic thyroid cancer still lack effective therapeutic options. Here, we aimed to assess HDAC9 and P300 expression in the papillary thyroid carcinoma cell line and compare them with normal thyroid cells.

Methods: Nthy-ori-3-1, a normal thyroid cell line, and BCPAP, a PTC cell line, were cultured for 24 and 48 h and immunofluorescence staining was used to determine the levels of HDAC9 and P300 protein expression. HDAC9 paracrine release was assessed using an ELISA assay.

Results: HDAC9 protein expression was higher in both cell groups at the 48th hour than at the 24th hour; however, P300 protein expression was lower in BCPAP cells at the 48th hour than at the 24th hour. In comparison to Nthy-ori-3-1, BCPAP expressed more HDAC9 and P300 proteins. HDAC9 secretion slightly increased in Nthy-ori-3-1 cells from 24 to 48 h. Furthermore, HDAC9 secretion in BCPAP cells dramatically decreased from 24 to 48 h.

Conclusion: Our findings revealed that the expression of HDAC9 and P300 was higher in the PTC cell line than in normal thyroid cells. This indicates that the acetylation mechanism in thyroid cancer cells is not the same as it is in healthy cells. Epigenetic studies may reveal the mechanisms underlying PTC with further analysis.

Evaluation of IL-10, MCP-1, IFN Gamma, and Protectin D1 Levels in Patients with Hashimoto's Thyroiditis

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Purpose: Hashimoto's thyroiditis (HT) is one of the most prevalent autoimmune endocrine diseases and caused by the loss of immune tolerance for the thyroid gland. Many pathophysiological mechanisms were speculated about the development of HT. In our study, we aimed to reveal the relationship between HT and IL-10, MCP-1, IFNɣ, and PD1 levels and compare them with control subjects.

Methods: We collected 37 patients with HT and 25 controls referred to our outpatient clinic. The diagnosis of HT was based on the detection of circulating antibodies to thyroid antigens and decreasing echogenicity on thyroid USG in patients with appropriate clinical characteristics. Serum IL-10, MCP-1, IFNɣ, and PD1 levels were detected using an ELISA KIT (96 T) method according to the manufacturer's instructions.

Results: All subjects were euthyroid (median TSH level was 1.68 mU/L in HT vs 1.83 mU/L in the controls, $p = 0.672$). Twenty-three of 37 patients with HT were taking L-thyroxin replacement. Levels of serum IL-10, IFNɣ, and PD1 in patients with HT were higher than the controls, but the differences were not statistically significant ($p = 0.393$, $p = 0.495$, and $p = 0.052$ respectively). The serum levels of MCP-1 in HT patients were statistically different and higher than the controls ($p = 0.018$). Correlation analysis displayed significant associations between IL-10, MCP-1, IFNɣ, and PD1 levels.

Conclusion: Our study demonstrated that serum MCP-1 levels in HT patients were significantly increased; on the other hand, significant difference was not found between HT patients and the controls in terms of serum IL-10, IFNɣ, and PD1 levels.

High Triglyceride-Glucose Index is Associated With Poor Prognosis in Patients With Acute Coronary Syndrome in Long-Term Follow-Up

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The triglyceride-glucose (TyG) index is calculated from fasting triglycerides and fasting glucose levels and is an indicator of insulin resistance. The present study investigates whether the TyG index has a role in predicting clinical outcomes in cases of acute coronary syndrome (ACS). This retrospective study included 646 patients with ST-elevation myocardial infarction (STEMI) and 1048 patients with non-ST-elevation myocardial infarction (NSTEMI). The association between major adverse cardiac events (MACEs) that developed in-hospital and at 60 months of follow-up and TyG index values were compared. Patients were divided into 2 groups: TyG index values of ≥ 8.65 and < 8.65. During the hospital stay and 60 months of follow-up, 303 MACEs occurred. In both the STEMI and NSTEMI groups, as the TyG index increased, an increase was observed in MACE rates. MACE rates were also found to be highest in the group with TyG index ≥ 8.65 ($P < .001$). TyG index, C-reactive protein, and age were independent predictors of MACEs in both the NSTEMI and STEMI groups. The present study found a significant association between higher TyG index values and increased risk of MACEs in ACS patients. The TyG index may prove useful to predict clinical outcomes in ACS patients.

Clinical Characteristics and The Treatment Modalities of Graves' Orbitopathy in A Tertiary Referral Center in Turkey: Changes Over Two Decades

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Purpose: To evaluate the changes in demographics, clinical findings, and treatment modalities in Graves' orbitopathy (GO) patients at a tertiary referral center in Turkey over the last two decades.

Methods: The clinical data of 752 GO patients were evaluated retrospectively. Patients were divided into 2 groups according to the first ophthalmic examination date; Group 1(n:344) between January 1998 and December 2007 and Group 2(n:408) between January 2008 and December 2017.

Results: The number of nonsmokers was significantly higher in Group 2 (44.0 vs. 26.5%, $p < 0.001$). The time from the diagnosis of thyroid dysfunction and referral to our center was 32.4 months in Group 1 and 34.8 months in Group 2, ($p = 0.166$). The most common treatment of hyperthyroidism was antithyroid medications. Radioiodine ablation treatment rate was significantly lower in Group 2 (14.8 vs. 9.1%, $p < 0.001$). The time between the diagnosis of thyroid disease and orbital involvement was 22.0 vs. 26.6 months in Groups 1 and 2, respectively ($p = 0.009$). The time elapsed between the diagnosis of orbital disease and referral to our clinic was 21.0 months vs. 22.4 months in Group 1 and 2, respectively ($p = 0.068$). Orbital disease was most commonly mild, and inactive. Mild and moderate to severe GO and the mean Clinical Activity Score significantly increased, and the rate of sight-threatening disease and orbital decompression surgery significantly decreased in Group 2 ($p = 0.042$; $p < 0.001$, respectively).

Conclusions: Mild and inactive orbital disease was the most common form of GO. The severity of GO is declining over the last two decades in Turkey.

Serum Visfatin Levels are Positively Correlated with Dietary Carbohydrate and Polyunsaturated Fatty Acid Intakes in Type 2 Diabetes Mellitus Patients

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Aims: To investigate the relationship between dietary intake and biochemical parameters and anthropometric measurements and serum visfatin concentrations.

Study design: A case-control study.

Methods: The study was carried out in 30 type 2 diabetes mellitus (T2DM) and 30 sex, age and body mass index (BMI) matches healthy control subjects. Biochemical parameters (glycemic and lipid profile, insulin resistance), anthropometric measurements (weight and bioimpedance) and dietary intake evaluation were obtained. Visfatin was assayed with ELISA method.

Results: The mean BMI of the case group was 31.36 ± 4.37 kg/m^2 and 29.80 ± 3.53 kg/m^2 in the control group ($p = 0.134$). The results revealed a significant increase in the weight, waist circumference, waist/hip ratio, visceral fat ratio, fasting glucose level, HbA1c and fasting insulin as well as in insulin resistance (HOMA-IR) among T2DM patients when compared with controls ($p < 0.05$). Serum visfatin levels were higher in the subjects with T2DM than healthy control subjects ($p < 0.05$). There was no significant correlation between visfatin levels and biochemical parameters and anthropometric measurements in patients with T2DM. Serum visfatin level was positively correlated with carbohydrate (CHO) and polyunsaturated fatty acid (PUFA) in T2DM patients ($r = 0.406$, $p = 0.026$; $r = 0.404$, $p = 0.027$, respectively).

Conclusion: T2DM patients compares with healthy control group increased serum visfatin levels. PUFA and CHO intake was found to be positively associated with visfatin levels.

The Significance of Forearm Bone Mineral Density Evaluation in Determining Surgical Indications in Primary Hyperparathyroidism

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Purpose: Forearm osteoporosis is a well-known complication of primary hyperparathyroidism (PHPT). However, measuring forearm bone mineral density (BMD) by dual-energy X-ray absorptiometry (DXA) at the distal radius is often neglected in clinical practice despite the fact that osteoporosis at any site is a criterion indicating surgery. We aimed to evaluate the importance and priority of forearm BMD and to determine its association with biochemical parameters.

Material and methods: Three hundred fourteen patients (272 females, 42 males) with PHPT who had BMD measurements at 3 sites were recruited for this retrospective study. The effect on surgical indications of osteoporosis only in the forearm was evaluated. Group 1 (n=151) with forearm osteoporosis and group 2 (n=163) without were compared in terms of biochemical and clinical parameters.

Results: In the overall study population, 165 of the 314 patients had osteoporosis in at least 1 site. Twenty seven percent (n=86/314) had osteoporosis only in the forearm, while the other 2 sites (lumbar spine and femoral neck) were normal or osteopenic. Surgery was indicated based on osteoporosis only in the forearm in 10% of patients (n=30/314). Corrected calcium and parathyroid hormone levels were significantly higher in group 1 than group 2 ($p=0.001$ and $p<0.001$, respectively) and were also

negatively correlated with distal radius BMD, T-score and Z-score in the whole study group.

Conclusion: Including the distal radius in BMD measurement increased the number of patients diagnosed with osteoporosis and for whom surgery was indicated. Calcium and PTH were also more frequently elevated in patients with forearm osteoporosis. These results show that distal radius BMD is relevant to the management of PHPT.

Unexpectedly High Mutation Rate of cyp11b1 Compared to cyp21a2 in Randomly-Selected Turkish Women: A Large Screening Study

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Purpose: Congenital adrenal hyperplasia (CAH) is a group of autosomal recessive disorders resulting from enzyme deficiencies associated with steroidogenesis. The clinical presentation of non-classic CAH (NCAH) in females is often indistinguishable from other hyperandrogenic disorders like polycystic ovary syndrome (PCOS). The data on the prevalence of NCAH in unselected women in the literature is scanty. The research aimed to evaluate the prevalence of NCAH, carrier frequencies, and the correlation between clinical symptoms and genotype in Turkish women.

Methods: The study group comprised two hundred and seventy randomly-selected unrelated asymptomatic women of reproductive age (18-45). Subjects were recruited from female blood donors. All volunteers underwent clinical examination and hormone measurements. The protein-encoding exons and exon-intron boundaries of the CYP21A2, CYP11B1, HSD3β2 and CYP21A2 promoter were sequenced by direct DNA sequencing.

Results: After genotyping, seven (2.2%) individuals were diagnosed with NCAH. The heterozygous carrier frequencies of CYP21A2, CYP21A2 promoter, CYP11B1, and HSD3β2 genes with 34, 34, 41, and 1 pathologic mutation were determined at 12.6%, 12.6%, 15.2%, and 0.37% of volunteers, respectively. Gene-conversion (GC) frequencies between CYP21A2/CYP21A1P and CYP11B1/CYP11B2 were determined as 10.4% and 14.8%, respectively.

Conclusion: Despite GC-derived higher mutation frequency determined in the CYP11B1 gene, the reason for the low frequency of NCAH due to 11OHD compared to 21OHD might be that gene-conversion arises with active CYP11B2 rather than an inactive pseudogene. HSD3β1 exhibits high homology with HSD3β2 located on the same chromosome; remarkably, it demonstrates low heterozygosity and no GC, most probably the outcome of a tissue-specific expression pattern.

The Clinical Characteristics and Outcomes of COVID-19 Patients with Pre-Existing Thyroid Dysfunction: A Nationwide Study

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To which extent the pre-existing hypothyroidism or hyperthyroidism has an impact on coronavirus infection 2019 (COVID-19) outcomes remains unclear. The objective of this study was to evaluate COVID-19 morbidity and mortality in patients with pre-existing thyroid dysfunction. A retrospective cohort of patients with a polymerase chain reaction (PCR)-confirmed COVID-19 infection (n=14 966) from March 11 to May 30, 2020, was established using the database of the Turkish Ministry of Health. We compared the morbidity and mortality rates of COVID-19 patients with pre-existing hypothyroidism (n=8813) and hyperthyroidism (n=1822) to those patients with normal thyroid function (n=4331). Univariate and multivariate regression analyses were performed to identify the factors associated with mortality. Mortality rates were higher in patients with hyperthyroidism (7.7%) and hypothyroidism (4.4%) than those with normal thyroid function (3.4%) ($p<0.001$ and $p=0.008$, respectively). Pre-existing hyperthyroidism was significantly associated with an increased risk of mortality (OR 1.54; 95% CI, 1.02-2.33; $p=0.042$) along with advanced age, male gender, lymphopenia and chronic kidney disease ($p<0.001$ for all). Although a potential trend was noted, the association between pre-existing hypothyroidism and mortality was not significant (OR 1.36; 95% CI, 0.99-1.86; $p=0.055$). In conclusion, this study showed an association between pre-existing hyperthyroidism with higher COVID-19 mortality. A potential trend towards increased mortality was also observed for hypothyroidism. The risk was more pronounced in patients with hyperthyroidism.

Estimates and Forecasts on the Burden of Prediabetes and Diabetes in Adult and Elderly Population in Turkiye

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Aims: Diabetes mellitus is a chronic disease that limits the quality and duration of life. We aimed to estimate the impact of demographic change on the burden of prediabetes and diabetes between 2010 and 2021, and the projections to 2030 and 2045 in Turkiye.

Materials and methods: Prediabetes and diabetes estimates were calculated by direct standardization method using age- and sex-specific prevalence data from the previous 'Turkish Epidemiology Survey of Diabetes, Hypertension, Obesity and Endocrine Disease' (TURDEP-II) as reference. The 2010-2021 population demographics were obtained from TurkStat. Comparative age-adjusted diabetes prevalence was estimated using the standard population models of world and Europe.

Results: Estimates depicted that the population (20-84 years) of any degree of glucose intolerance in Turkiye increased by over 5.7 million (diabetes: 2.4 million and prediabetes: 3.3 million) from 2010 to 2021. While the increase in prediabetes and diabetes prevalence was 24.3% and 35.2% in overall population, corresponding increase were 46.5% and 51.3% in the elderly. Estimated prevalence of prediabetes and diabetes in 2021 was significantly higher in women than in men (prediabetes: 32.6% vs. 25.2%; diabetes: 17.1% vs. 14.2%). The comparative age-adjusted diabetes prevalence to the European population model was higher than that of the world population model (19.4% vs. 15.0%). According to the projections the prevalence of diabetes will reach 17.5% in 2030 and 19.2% in 2045.

Conclusion: Assuming age- and sex-specific diabetes prevalence of TURDEP-II survey remained constant, this study revealed that the number of people with diabetes in the general population (particularly in the elderly) in the last 11 years in Turkiye has increased in parallel with the population growth and aging; it will continue to grow over the coming decades. This means the burden of diabetes on the social, economic and health services will remain to increase. The fact suggests that there is an urgent need for re-organization of care as well as to develop and implement a country-specific prevention program to reduce this burden.

The Relations of Circulating Agouti-Related Peptide and Leptin with Altered Sleep Architecture in Patients with Active Cushing's Disease: A Pilot Study

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Aim: To evaluate sleep architecture of patients with Cushing's disease (CD) and to explore whether agouti-related peptide (AgRP) and/or leptin play a permissive role in sleep alterations in patients with active CD.

Methods: We performed polysomnography on 26 patients with active CD and age 26 age- and sex-matched control subjects. Blood samples were obtained from all participants for the analyzes of AgRP and leptin. The laboratory and sleep-related parameters were compared.

Results: The groups were similar in age, gender, and body mass index. The CD group had reduced sleep efficiency (71.6 ± 12.1% vs. 78.8 ± 12.6%, $p = 0.042$) and increased wake after sleep onset (WASO%) (24.7 ± 13.1% vs. 17.4 ± 11.6%, $p = 0.040$) as compared to control group. Seventeen patients with CD (65.4%) and 18 control subjects (69.2%) had obstructive sleep apnea. Serum AgRP (13.2 ± 7.4 pg/ml vs. 9 ± 3.1, $p = 0.029$), leptin (59.5 mcg/l, [IQR] 32.6-94.6 vs. 25.3 mcg/l, [IQR] 12.9-57.5, $p = 0.007$) were higher in CD group. AgRP and leptin correlated negatively with total sleep time, sleep efficiency, stage N2 sleep (%), and positively with WASO%. In multiple regression analyses, serum cortisol ($\beta = -0.359$, $p = 0.042$) and AgRP ($\beta = -0.481$, $p = 0.01$) were significant predictor of sleep efficiency. AgRP was also significant predictor of WASO% ($\beta = 0.452$ and $p < 0.05$).

Conclusions: Active CD carries an increased risk of impaired sleep efficiency and continuity which may worsen health-related quality of life. Elevated circulating AgRP and, to a lesser extent, leptin may be associated with decreased sleep efficiency and continuity in patients with CD. Patients with CD who have subjective sleep symptoms should be screened with polysomnography.

Lactobacillus GG is Associated with Mucin Genes Expressions in Type 2 Diabetes Mellitus: A Randomized, Placebo-Controlled Trial

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Purpose: Recent studies indicate that dysbiosis of gut microbiota and low-grade inflammation are important pathogenic determinants of type two diabetes mellitus (T2DM). The aim of this study is to investigate the effects of Lactobacillus GG on glycemic control, lipid profile, inflammatory parameters, and some gene expression levels in individuals with T2DM.

Methods: In a randomized, placebo-controlled trial, 34 women, aged 30-60 years with T2DM consumed daily probiotics or placebo for 8 weeks. The probiotic group consumed 10×10^9 Cfu/day Lactobacillus rhamnosus GG ATCC 53,103 (LGG), approved by the TR Ministry of Food, Agriculture, and Livestock. Anthropometric measurements, food diary, fasting blood, and fecal samples were taken at baseline and post-treatment.

Results: Fasting blood glucose was significantly decreased in probiotic ($p = 0.049$) and placebo ($p = 0.028$), but there was no difference between the groups. In the probiotic group, no significant difference was observed in HbA1c, fructosamine, lipid profile, and inflammatory variables compared to baseline. In this group, with LGG supplementation, mucin 2 and 3A (MUC2 and MUC3A) gene expressions increased more than ninefolds ($p = 0.046$ and $p = 0.008$, respectively) at post-treatment. Meanwhile, there was no significant change in any of the gene expressions in the placebo group. There was no significant difference in energy, protein, dietary fiber, and cholesterol intakes between placebo and probiotic groups during the study. However, daily fat intake ($p = 0.003$), body weight ($p = 0.014$), and body fat ($p = 0.015$) in the probiotic group were significantly decreased.

Conclusion: In this study, the effects of a single probiotic strain were investigated for 8 weeks. At the end of the study, although there was no finding that clearly reflected on the glycemic parameters of T2DM, its beneficial effects on the expression of mucin genes, which are responsible for weight loss and protection of intestinal barrier functions, cannot be denied. Further studies are needed to reveal the importance of these findings.

Clinical trial registration: ID: NCT05066152, October 4, 2021 retrospectively registered in ClinicalTrials.gov PRS web site.

Downregulation of Plasma MicroRNA-29c-3p Expression May be a New Risk Factor for Diabetic Retinopathy

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Background: Circulation miRNAs have emerged as new biomarkers for identifying and monitoring the microvascular complications of diabetes. The aim of this study is to evaluate the levels of five candidate miRNAs (miR-29c-3p, miR-18a, miR-31, miR-181 and miR-20a) in patients with diabetic retinopathy (DR) and their relationship with disease severity.

Methods: The study included 31 diabetes patients without DR (NDR group), 68 patients with DR (DR group) and 30 healthy controls (HC group). Twenty-five of patients with DR were proliferative DR (PDR group) and 43 were non-proliferative DR (NPDR group) patients. Metabolic parameters and serum vascular endothelial growth factor (VEGF) levels of all participants were measured. Circulating miRNAs levels were determined by quantitative real-time PCR. Fundus examinations of all patients were performed by a single ophthalmologist.

Results: VEGF levels were significantly higher in the NDR, and DR groups compared to HC group ($P=0.011$ and $P=0.014$, respectively). Plasma miR-29c-3p was downregulated in diabetic patients with retinopathy and without retinopathy. This downregulation was more prominent in diabetic patients without retinopathy compared to those with retinopathy ($P=0.016$). There was no significant difference in plasma levels of miR-18a, miR-20a, miR-18a and miR-31 between diabetic subjects with and without retinopathy ($P>0.05$). There was no correlation between DR severity and the levels of miRNAs ($P>0.05$). In multivariate logistic regression analysis, it was found that changes in plasma miR-29c-3p expression of diabetic patients increased DR risk independent of other risk factors.

Conclusions: Plasma miR-29c-3p expression is downregulated in diabetic patients with and without retinopathy, and changes in this miRNA are an independent risk factor for the development of DR.

The Spectrum of Thyroid Function Tests and Autoantibodies During Hospitalization and After Six Months of Discharge in COVID-19 Patients: Does COVID-19 Trigger Autoimmunity?

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Objective: The aim of the study was to investigate thyroid function test (TFT) results and anti-thyroid antibody titers in acutely infected COVID-19 patients, as well as the changes in TFT and autoantibody results during the 6-months recovery period among survivors.

Patients and design: A total of 163 adult COVID-19 patients and 124 COVID-19 survivors were evaluated in terms of TFT (thyroid stimulating hormone [TSH], free triiodothyronine [fT3], and free thyroxine [fT4]) and anti-thyroid antibodies (anti-thyroglobulin [anti-Tg] and anti-thyroid peroxidase [anti-TPO]).

Results: Thyroid dysfunction was noted in 56.4% of patients on admission, including the non-thyroidal illness syndrome (NTIS) in most cases. Presence vs. absence of thyroid dysfunction on admission was associated with significantly higher rate of severe disease ($p < 0.001$), while severe vs. mild-to-moderate disease was associated with significantly lower serum fT3 levels ($p = 0.001$). Overall, 94.4% of survivors were euthyroid at the time of 6 months post-discharge, while in some patients, the post-COVID-19 recovery period was also associated with significantly increased anti-TPO titers and the presence of new-onset or persistent subclinical hypothyroidism.

Conclusion: This is one of the few studies to evaluate TFT and autoantibodies over a 6-month period after recovery from COVID-19. The presence of emergent or persistent subclinical hypothyroidism and the significantly increased anti-TPO titers in some patients during the convalescence period suggest the need for follow-up for development of thyroid dysfunction and autoimmunity among COVID-19 survivors.

Oxidative and Chromosomal DNA Damage in Patients with Type I Gaucher Disease and Carriers

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Background and aims: Gaucher disease (GD) is caused by a genetic deficiency of the beta-glucocerebrosidase enzyme which results in the accumulation of glucosylceramide in macrophages. This accumulation may induce oxidative stress, resulting in DNA damage in patients with GD. The aim of this study was to assess plasma 8-hydroxy-2'-deoxyguanosine (8-OHdG) levels and cytokinesis-block micronucleus cytome (CBMN-cyt) assay parameters in the peripheral blood lymphocytes of patients with GD and carriers, evaluate the possible associations of these values with GD, and determine whether they can be used as potential biomarkers in GD.

Methods: This study included 20 patients with type 1 GD, six carriers, and 27 age- and sex-matched healthy controls. CBMN-cyt assay parameters in peripheral blood lymphocytes of the patients with GD, carriers, and controls were evaluated and 8-OHdG levels in their plasma samples were measured.

Results: CBMN-cyt assay parameters in patients with GD and carriers were not significantly different when compared with controls ($p > 0.05$). However, plasma 8-OHdG levels were found to be higher in both patients with GD and carriers than in control subjects ($p < 0.01$).

Conclusions: Oxidative DNA damage may be a useful prognostic tool, whereas the CBMN-cyt assay cannot be used as a predictive biomarker of GD.

Characterization of Peripheral Blood T Follicular Helper (TFH) Cells in Patients with Type 1 Gaucher Disease and Carriers

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Background: Gaucher disease (GD) is the most common autosomal recessive lipid storage disease. In this study, the changes in TFH cells and IL-4 and IL-21 cytokines in blood samples of GD patients, carriers and healthy volunteers were investigated.

Methods: Two pretreatment type 1 GD patients, 20 currently treated type 1 GD patients, 6 carriers, and 27 healthy volunteers were enrolled in the study. TFH cell ($CD45RA^-CD4^+CXCR5^+$) number, phenotype (PD1, ICOS expression), and cytokine production (IL-21, IL-4) were assessed via flow cytometric assays.

Results: No significant differences were found between the groups with respect to the number, frequency and PD1 or ICOS expression of TFH cells between healthy

controls, patients and carriers. However, IL-4$^+$ TFH cells were significantly reduced both in percent and number in the treated GD patients compared with healthy controls ($p < 0.05$). Interestingly, the IL-21$^+$ TFH cell number was increased in treated GD patients. When TFH cells were examined based on CXCR3 expression, the frequency of the PD1$^+$Th17-Th2-like fraction (CXCR3$^-$) was found to be significantly increased in treated GD patients.

Conclusion: To our knowledge, this is the first study to assess TFH cells in GD patients, and to show that the production of IL-4 and IL-21 by TFH cells and their subsets may be altered in type 1 GD patients.

The Fat Kidney

Ludovica Verde , Stefania Lucà, Simona Cernea , Cem Sulu, Volkan Demirhan Yumuk, Trond Geir Jenssen, Silvia Savastano , Gerardo Sarno, Annamaria Colao , Luigi Barrea , Giovanna Muscogiuri

Curr Obes Rep. 2023 Jun;12(2):86-98. doi: 10.1007/s13679-023-00500-9. Epub 2023 Mar 18. PMID: 36933154 PMCID: PMC10250266 DOI: 10.1007/s13679-023-00500-9

Purpose of review: The purpose of this review is to summarize the current evidence on the role of obesity in the development and progression of chronic kidney disease and the current evidence on nutritional, pharmacological, and surgical strategies for the management of individuals with obesity and chronic kidney disease.

Recent findings: Obesity can hurt the kidney via direct pathways, through the production of pro-inflammatory adipocytokines, and indirectly due to systemic complications of obesity, including type 2 diabetes mellitus and hypertension. In particular, obesity can damage the kidney through alterations in renal hemodynamics resulting in glomerular hyperfiltration, proteinuria and, finally, impairment in glomerular filtratation rate. Several strategies are available for weight loss and maintenance, such as the modification of lifestyle (diet and physical activity), anti-obesity drugs, and surgery therapy, but there are no clinical practice guidelines to manage subjects with obesity and chronic kidney disease. Obesity is an independent risk factor for the progression of chronic kidney disease. In subjects with obesity, weight loss can slow down the progression of renal failure with a significant reduction in proteinuria and improvement in glomerular filtratation rate. Specifically, in the management of subjects with obesity and chronic renal disease, it has been shown that bariatric surgery can prevent the decline in renal function, while further clinical studies are needed to evaluate the efficacy and safety on the kidney of weight reducing agents and the very low-calorie ketogenic diet.

Evaluation of Microvascular Complications in Patients with New Diagnosis Type 2 Diabetes

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Objective: The incidence of microvascular complications such as diabetic retinopathy, diabetic nephropathy and diabetic neuropathy has increased in newly diagnosed diabetes patients. The aim of this study was to determine the factors affecting the incidence of microvascular complications in newly diagnosed patients with type 2 diabetes.

Patients and methods: This study was conducted on 97 newly diagnosed type 2 DM patients who applied to Malatya Training and Research Hospital Endocrinology outpatient clinic between September 2021 and July 2022. The patient files were reviewed retrospectively and their age, height, weight, body mass index (BMI), fasting/postprandial blood glucose measurements, serum HDL cholesterol, LDL cholesterol, total cholesterol, triglyceride, HbA1c levels, glomerular filtration rate (GFR) and complications of retinopathy, nephropathy, and neuropathy were recorded. Mann-Whitney U, t-test, Kruskal-Wallis, Binary logistic regression analysis, and Chi-square analysis were used to analyze the data.

Results: The mean age of the patients included in the study was 47.40±7.78 (min: 23 - max: 62). Non-proliferative retinopathy was observed in 74.2% of patients, proliferative retinopathy in 25.8%, diffuse neuropathy in 49.5% and mononeuropathy was detected in 9.3% of them. Fasting blood glucose, postprandial blood glucose and HbA1c values were found to be higher in patients with proliferative retinopathy than in patients without retinopathy. Fasting blood glucose, postprandial blood glucose and HbA1c values were found to be higher in patients with neuropathy than in patients without neuropathy. In addition, patients with mononeuropathy had statistically significantly higher HbA1c values than patients with diffuse-type neuropathy. It was found that the urine protein values of patients with mononeuropathy were significantly higher than those without neuropathy and those with diffuse neuropathy. Each 0.677-unit increase in HbA1c increases the risk of proliferative retinopathy 1.98-fold, and every 1.018-unit increase increases the risk of neuropathy 2.76-fold. Proliferative retinopathy and mononeuropathy rates were discovered to be higher in patients with a family history.

Conclusions: Microvascular complications are common in newly diagnosed T2DM patients and an increase in HbA1c is a significant risk factor. Every newly diagnosed T2DM patient should be screened for microvascular complications.

Betatrophin, Elabela, Asprosin, Glucagon and Subfatin Peptides in Breast Tissue, Blood and Milk in Gestational Diabetes

Adem Yavuz, Mustafa Ata Aydin, Kader Ugur, Suna Aydin , Arzu Senol, Yakup Baykus, Rulin Deniz, İbrahim Sahin , Mehmet Hanifi Yalcin, Berrin Tarakci Gencer, Yaprak Kandemir Deniz, Sefer Ustebay, Zuhal Karaca Karagoz, Elif Emre, Suleyman Aydin

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We investigated the presence of asprosin (ASP), betatrophin, elabela (ELA), glucagon and subfatin (SUB) in the milk of mothers with gestational diabetes mellitus (GDM) and compared their levels with blood levels. We also investigated whether these peptides are synthesized by the breast. We investigated 12 volunteer mothers with GDM and 14 pregnant non-GDM control mothers. The peptides were measured using ELISA and their tissue localization was determined using immunohistochemistry. Breast milk contains ASP, betatrophin, ELA, glucagon and SUB. The amount of the peptides ranged from highest to the lowest in colostrum, transitional milk and mature milk. The amount of peptides in the milk was greater than for blood. The peptides, except for ELA, were increased in milk and blood by GDM. Betatrophin and ELA are synthesized in the connective tissue of the breast. ASP, glucagon and SUB are synthesized in the alveolar tissue of the breast. These peptides in breast milk may contribute to the development of the gastrointestinal tract of newborns and infants.

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Sayın Prof. Dr. Fatma Belgin Efe'ye sağlıklı bir emeklilik dönemi dileriz.

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