TÜRKİYE ENDOKRİNOLOJİ VE METABOLİZMA DERNEĞİ BÜLTENİ

Üç ayda bir çevrimiçi yayınlanır.

Sayı 86 • Nisan – Mayıs – Haziran • 2024

45. TÜRKİYE ENDOKRİNOLOJİ VE METABOLİZMA HASTALIKLARI KONGRESİ TAMAMLANDI

"45. Türkiye Endokrinoloji ve Metabolizma Hastalıkları Kongresi", Susesi Luxury Resort Belek Antalya'da, 17-21 Nisan 2024 tarihlerinde 1013 meslektaşımızın katılımı ile başarıyla tamamlandı.

Kongremizin ana teması son yıllarda etkisini giderek gösteren iklim değişikliğine dikkat çekmek amacıyla "Çevre ve İnsan" olarak belirlendi.

Kongre Başkanlığını Prof. Dr. Mustafa Cesur, Kongre Bilimsel Sekreterliğini Prof. Dr. Ayşe Kubat Üzüm ve Prof. Dr. Mine Adaş, Onursal Bilim Kurulu Başkanlığını Prof. Dr. Gürbüz Erdoğan ve Prof. Dr. Hüsrev Hatemi'nin yaptığı kongremizde 3 Kurs (Dinamik Testlerin Yorumlanması Kursu, Endokrinolojide Görüntüleme Kursu, İnsülin Pompa Kursu), Ustalara Saygı Oturumu, Genç Araştırıcı Sunumu, 15 Konferans, 32 Panel, 9 Uzmanına Danış, 12 Uydu Sempozyumu, 9 Sözel Bildiri Oturumu, 3 e-Poster Oturumu, 11 Çalışma Grubu Toplantısı yer aldı. Toplam 280 meslektaşımız konuşmacı ve oturum başkanlığı yaparak kongremize bilimsel katkı sağladı.

"45. Türkiye Endokrinoloji ve Metabolizma Hastalıkları Kongresi"nde 58 sözel, 155 e-poster bildiri olmak üzere toplam 213 bildiri sunuldu. Kongre bildiri kitabına linkten ulaşabilirsiniz.

Bilimsel Kurul tarafından yapılan değerlendirmeler sonucunda en iyi sözlü ve poster bildirileri belirlenerek 3 sözlü ve 4 poster bildiriye ödül verildi. Endocrinology Research and Practice 7. Ödüllü Makale Yarışması'nın sonuçları da kongremiz sırasında açıklandı ve ödüller sahiplerini buldu.

2024 Genç Araştırıcı Ödülünü almaya hak kazanan Doç. Dr. Süleyman Nahit Şendur ödül töreni öncesinde "Akromegalinin 40 yılda Değişen Panoraması Precision Medicine Gereksinimini İşaret Ediyor: Hacettepe Deneyimi" başlıklı sunumunu gerçekleştirdi.

Kongrede, akreditasyon sürecini başarı ile tamamlayan Akdeniz Üniversitesi Tıp Fakültesi Endokrinoloji ve Metabolizma Hastalıkları Bilim Dalı'na akreditasyon belgesi takdim edildi. Detaylara ulaşmak için lütfen tıklayınız.

Her yıl olduğu gibi bu yıl da Ustalara Saygı Oturumu'na yer verildi. Oturumda Prof. Dr. Temel Yılmaz hocamız konuşmasını gerçekleştirdi.

Ord. Prof. Dr. Eric Frank Konferansı'nda Prof. Dr. Jean Claude Mbanya ve ENDO Konferansı'nda Prof. Dr. Aliya Khan konuşmalarını gerçekleştirdiler.

Kongre programı dahilinde TEMD Yönetim Kurulu ve Erken Kariyer Endokrinologlar Grubu'nun ortak projesi olan "Mentörlük Programı"nın 1. yıl sonuçları paylaşıldı.

Kongremize emek ve değerli zamanlarını harcayan Bilimsel Kurul Üyelerine, Konuşmacı ve Oturum Başkanı olarak görev alan tüm üyelerimize, destek veren ilaç firmalarına ve katılan tüm meslektaşlarımıza teşekkür ederiz.


45.
TÜRKİYE ENDOKRİNOLOJİ VE METABOLİZMA HASTALIKLARI KONGRESİ
TEMD 60 YAŞINDA


Endokrinoloji ve Metabolizma Hastalıkları Tıpta Uzmanlık Yeterlik Kurulu
KURUM TIPTA UZMANLIK EĞİTİMİ YETERLİK BELGESİ
Endokrinoloji ve Metabolizma Hastalıkları Tıpta Uzmanlık Yeterlik Kurulu, Eğitim Kurumları ve Programları Değerlendirme Komisyonu tarafından yapılan değerlendirme süreçleri sonrasında,
Akdeniz Üniversitesi Tıp Fakültesi Endokrinoloji ve Metabolizma Hastalıkları Bilim Dalı
Yeterlik Kurulu'nun belirlediği Endokrinoloji ve Metabolizma Hastalıkları yandal uzmanlık eğitimi ile ilgili koşulları karşılamış ve 17 Nisan 2024 tarihinden itibaren beş (5) yıl süreyle geçerli olmak üzere bu belgeyi almaya hak kazanmıştır.
Prof. Dr. Füsun Saygılı
Prof. Dr. Nilgün Başkal
Prof. Dr. Mustafa Cesur
Prof. Dr. Orhan Odabaşı
Prof. Dr. Sebnem Korur Fincancı


Doç. Dr. Süleyman Nahit Şendur
Türkiye Endokrinoloji ve Metabolizma Derneği 2024
GENÇ ARAŞTIRICI ÖDÜLÜ
kazanmıştır.
Prof. Dr. Mine Adaş
Yönetim Kurulu Üyesi
Prof. Dr. Mustafa Cesur
TEMD Başkanı
Prof. Dr. Zeynep Cantürk
TEMD Yönetim Kurulu Üyesi


17-21 Nisan 2024 | Sus

Kongremiz dahilinde değerli hocalarımız Prof. Dr. Faruk Alagöl, Prof. Dr. Metin Arslan, Prof. Dr. Sema Akalın, Prof. Dr. Halil Azizlerli, Prof. Dr. Gürbüz Erdoğan, Prof. Dr. Olcay Gedik, Prof. Dr. Sadi Gündoğdu, Prof. Dr. Mehmet Ali Gündoğan, Prof. Dr. Hüsrev Hatemi, Prof. Dr. Şazi İmamoğlu, Prof. Dr. Mustafa Kutlu, Prof. Dr. Tümay Sözen, Prof. Dr. Mehmet Tüzün, Prof. Dr. Aydan Usman, Prof. Dr. Ali Rıza Uysal, Prof. Dr. Candeğer Yılmaz'a hizmet ödülü takdim edilmiştir.

Kongremizin bilimsel programı dışında da yakın zamanda kaybettiğimiz değerli meslektaşımız Prof. Dr. Seda Sancak Nurdan için bir anma töreni gerçekleştirildi. Törende bizi yalnız bırakmayan, acımızı paylaşan değerli üyelerimize teşekkür ederiz.

SÖZLÜ BİLDİRİ ÖDÜLLERİ

● Sözlü Bildiri Birincilik Ödülü (S-058)

Yetişkin Tip 1 Gaucher Hastalarında Kemik Mineral Yoğunluğu ve İçeriğinin İskelet Kas Kütlesi, Kas Gücü ve Fiziksel Performans İle İlişkisinin Değerlendirilmesi

Suayb Celalettin Sayın[1], İsa Cüce[1], Taha Furkan Çakır[1], Fahri Bayram[2]

[1]Erciyes Üniversitesi Tıp Fakültesi, Fiziksel Tıp ve Rehabilitasyon Anabilim Dalı, Kayseri, Türkiye
[2]Erciyes Üniversitesi Tıp Fakültesi, İç Hastalıkları Anabilim Dalı, Endokrinoloji ve Metabolizma Hastalıkları Bilim Dalı, Kayseri, Türkiye

● Sözlü Bildiri İkincilik Ödülü (S-043)

Primer Hiperparatiroidi Tanılı Hastalarda Dinamik 4 Boyutlu Perfüzyon MRG İle Lokalizasyon Başarısının Değerlendirilmesi

Sabri Engin Altıntop[1], Mahi Nur Cerit[2], Emetullah Cindil[2], Halit Nahit Şendur[2], Tuğba Barlas[1], Mehmet Muhittin Yalçın[1], Alev Eroğlu Altınova[1], Müjde Yaşım Aktürk[1], Füsun Baloş Törüner[1], Mehmet Ayhan Karakoç[1], Ethem Turgay Cerit[1]

[1]Gazi Üniversitesi Tıp Fakültesi, Endokrinoloji ve Metabolizma Hastalıkları Bilim Dalı, Ankara
[2]Gazi Üniversitesi Tıp Fakültesi, Radyoloji Anabilim Dalı, Ankara

● Sözlü Bildiri Üçüncülük Ödülü (S-049)

Diferansiye Tiroid Kanserlerinde Ekstratiroidal Uzanımı Tespit Etmede Ultrasonografinin Yeri

Adile Begüm Bahçecioğlu2, Fatma Avcı Merdin[1] , Özge Baş Aksu[1] , Serpil Dizbay Sak[3], Neşe Ersöz Gülçelik[2], Sevim Güllü[1] , Murat Faik Erdoğan[1]

[1]Ankara Üniversitesi Tıp Fakültesi Endokrinoloji ve Metabolizma Hastalıkları Bilim Dalı
[2]SBÜ Gülhane Eğitim ve Araştırma Hastanesi Endokrinoloji ve Metabolizma Hastalıkları Bilim Dalı
[3]Ankara Üniversitesi Tıp Fakültesi Patoloji Anabilim Dalı

POSTER BİLDİRİ ÖDÜLLERİ

● Poster Bildiri Birincilik Ödülü (EP-104)

Diferansiye Tiroid Kanserli Hastalarda Radyoaktif İyot Tedavisinin Paratiroid Bezi Fonksiyonları Üzerine Uzun Dönem Etkileri

Fatma Avcı Merdin[1], Demet Çorapçıoğlu[1], Mustafa Şahin[1]

[1]Ankara Üniversitesi Tıp Fakültesi, Endokrinoloji ve Metabolizma Hastalıkları Bilim Dalı, Ankara, Türkiye

● Poster Bildiri İkincilik Ödülü (EP-001)

Erişkin Endokrinoloji Kliniklerimizde Takip Edilen Konjenital Adrenal Hiperplazili Hastalarımızın Değerlendirildiği Çok Merkezli Ulusal Çalışma

Melek Eda Ertörer[1], İnan Anaforoğlu[2], Nusret Yılmaz[3], Gamze Akkuş[4], Seda Turgut[5], Kürşad Ünlühızarcı[6], Özlem Soyluk Selçukbiricik[7] , Fatma Avcı Merdin[8], Ersen Karakılıç[9], Esma Pehlivan[10], Göknur Yorulmaz[11], Özen Öz Gül[12], Rıfat Emral[8], Medine Nur Kebapçı[11], Fettah Acıbucu[13], Dilek Tüzün[14], Süheyla Görar[15], Emek Topuz[14], Gülay Şimşek Bağır[1], Selin Dinçer Genç[16], Kezban Demir[17], Gonca Tamer[17], Güzin Yaylalı[18], Tülay Omma[19], Sevde Nur Fırat[19], Gönül Koç[19], Emre Sedar Saygılı[9], Banu Şarer Yürekli[1]

[1]Başkent Üniversitesi Tıp Fakültesi, Endokrinoloji ve Metabolizma Bilim Dalı

[2]Mehmet Ali Aydınlar Acıbadem Üniversitesi Tıp Fakültesi, Endokrinoloji ve Metabolizma Bilim Dalı

[3]Akdeniz Üniversitesi Tıp Fakültesi Endokrinoloji Kliniği

[4]Çukurova Üniversitesi Tıp Fakültesi, Endokrinoloji ve Metabolizma Kliniği

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[6]Erciyes Üniversitesi Tıp Fakültesi Endokrinoloji Kliniği

[7]İstanbul Üniversitesi Tıp Fakültesi Endokrinoloji Kliniği

[8]Ankara Üniversitesi Tıp Fakültesi Endokrinoloji Kliniği

[9]Çanakkale 18 Mart Üniversitesi Tıp Fakültesi Endokrinoloji Kliniği

[10]Ege Üniversitesi Tıp Fakültesi Endokrinoloji Kliniği

[11]Eskişehir Osmangazi Üniversitesi Tıp Fakültesi Endokrinoloji Kliniği

[12]Uludağ Üniversitesi Tıp Fakültesi Endokrinoloji Kliniği

13Sağlık Bilimleri Üniversitesi Tıp Fakültesi, Adana Eğitim ve Araştırma Hastanesi Endokrinoloji Kliniği

[14]Kahramanmaraş Sütçü İmam Üniversitesi Tıp Fakültesi Endokrinoloji Kliniği

[15]Sağlı Bilimleri Üniversitesi Tı Fakültesi, Antalya Eğitim ve Araştırma Hastanesi, Endokrinoloji Kliniği

[16]İnönü Üniversitesi Tıp Fakültesi, Endokrinoloji Kliniği

[17]İstanbul Medeniyet Üniversitesi Tıp Fakültesi, Endokrinoloji Kliniği

[18]Pamukkale Üniversitesi Tıp Fakültesi, Endokrinoloji Kliniği

[19]Sağlık Bilimleri Üniversitesi Tıp Fakültesi, Ankara Eğitim ve Araştırma Hastanesi Endokrinoloji Kliniği

● Poster Bildiri Üçüncülük Ödülü (EP-105)

Subakut Tiroditli Hastalarda Tedavi Seçiminde Sedimantasyon, C-Reaktif Protein ve Tiroid Fonksiyon Testlerinin Rolü

Emek Topuz[1], Dilek Tüzün[2], Murat Şahin[2], Bülent Savut[1], Cem Onur Kıraç[1]

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[2]Kahramanmaraş Sütçü İmam Tıp Fakültesi, Endokrinoloji ve Metabolizma Hastalıkları Bilim Dalı

● Poster Bildiri Üçüncülük Ödülü (EP-069)

İnsülinoma Hastalarında Klinik Sunum, Tanı, Tedavi ve Prognoz: Çok Merkezli Çalışma

Şenay Topsakal[1], Güzin Fidan Yaylalı[1], Zeliha Yarar[2], Fatma Avcı Merdin[3], Seda Karslı[4], Sema Çiftçi[4], Mehmet Sercan Ertürk[5], Barış Önder Pamuk[5], Ayşe Özdemir Yavuz[6], Kader Uğur[7] , Ogün Bilen[8], Sayid Shafi Zuhur[8], İsmail Engin[9], Mehmet Güven[10], Fazıl Mustafa Cesur[11], Sevgül Fakı[12], Şefika Burçak Polat[12], Bekir Çakır[12], Hatice Özışık[13], Gökçen Ünal Kocabaş[13], Mehmet Erdoğan[13], Şevki Çetinkalp[13], İlkcan Çerçi Koçar[14], Esen Akbay[14], Sema Yarman[15]

[1]Pamukkale Üniversitesi Tıp Fakültesi Endokrinoloji ve Metabolizma Hastalıkları Bilim Dalı Denizli

[2]Konya Necmettin Erbakan Üniversitesi Meram Tıp Fakültesi- Endokrinoloji ve Metabolizma Hastalıkları Bilim Dalı, Konya

[3]Ankara Üniversitesi Tıp Fakültesi Endokrinoloji ve Metabolizma Hastalıkları Bilim Dalı, Ankara

[4]Sağlık Bakanlığı, Sağlık Bilimleri Üniversitesi Dr Sadi Konuk Eğitim Araştırma Hastanesi Endokrinoloji ve Metabolizma Hastalıkları Bilim Dalı, İstanbul

5Katip Çelebi Üniversitesi Atatürk Eğitim ve Araştırma Hastanesi Endokrinoloji ve Metabolizma Hastalıkları Bilim Dalı, İzmir

[6]İnönü Üniversitesi Turgut Özal Tıp Merkezi Endokrinoloji ve Metabolizma Hastalıkları Bilim Dalı, Malatya

[7]Fırat Üniversitesi Hastanesi Endokrinoloji ve Metabolizma Hastalıkları Bilim Dalı, Elazığ

[8]Namık Kemal Üniversitesi Tıp Fakültesi Endokrinoloji Bilim Dalı, Tekirdağ

[9]Sağlık Bilimleri Üniveristesi 2. Abdülhamid Han Eğitim ve Araştırma Hastanesi Endokrinoloji ve Metabolizma Hastalıkları Bilim Dalı, İstanbul

[10]Sağlık Bilimleri Üniversitesi Diyarbakır Gazi Yaşargil Eğitim ve Araştırma Hastanesi, Endokrinoloji ve Metabolizma Hastalıkları Bilim Dalı, Diyarbakır

[11]Ankara Güven Hastanesi Endokrinoloji ve Metabolizma Hastalıkları Bölümü, Ankara

[12]Ankara Yıldırım Beyazıt Üniversitesi Tıp Fakültesi Endokrinoloji Bilim Dalı Ankara Bilkent Şehir Hastanesi, Ankara

[13]Ege Üniversitesi Tıp Fakültesi Endokrinoloji ve Metabolizma Hastalıkları Bilim Dalı, İzmir

[14]Mersin Üniversitesi Tıp Fakültesi Endokrinoloji ve Metabolizma Hastalıkları Bilim Dalı, Mersin

[15]İstanbul Üniversitesi, İstanbul Tıp Fakültesi, Endokrinoloji ve Metabolizma Hastalıkları Bilim Dalı, İstanbul.

ENDOCRINOLOGY RESEARCH AND PRACTICE
7. ÖDÜLLÜ MAKALE YARIŞMASI ÖDÜLLERİ

Birincilik Ödülü

Immunohistochemical and Clinical Assessment of Low-Risk Thyroid Tumors

Berna İmge Aydoğan[1,2], Rovshan Hasanov[1,3], Seher Yüksel[4], Selim Sevim[4], Serpil Dizbay Sak[4], Sevim Güllü[1]

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[3]Endocrinology Clinic, Leyla Medical Center, Baku, Azerbaijan
[4]Department of Pathology, Hacettepe University Faculty of Medicine, Ankara, Turkey

https://endocrinolrespract.org/en/immunohistochemical-and-clinical-assessment-of-low-risk-thyroid-tumors-131187

İkincilik Ödülü

Presence of Multiple Endocrine Neoplasia-1 Mutations in Patients with Primary Hyperparathyroidism Detected on Clinical and Sonographical Suspicion: Report of 2 Novel Mutations

Muhammet Cüneyt Bilginer[1], Cevdet Aydın[2], Sevgül Fakı[3], Oya Topaloğlu[2], Hanife Saat[4], Buşranur Çavdarlı[5], Reyhan Ersoy[2], Bekir Çakır[2]

[1]Department of Endocrinology and Metabolism, Karadeniz Technical University Facultyof Medicine, Trabzon, Turkey
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[3]Department of Endocrinology and Metabolism, Ankara City Hospital, University of Health Sciences, Ankara, Turkey
[4]Department of Medical Genetics, Ankara Diskapi Yildirim Beyazit Education and Research Hospital, Ankara, Turkey
[5]Department of Medical Genetics, Ankara City Hospital, University of Health Sciences, Ankara, Turkey

https://endocrinolrespract.org/en/presence-of-multiple-endocrine-neoplasia-1-mutations-in-patients-with-primary-hyperparathyroidism-detected-on-clinical-and-sonographical-suspicion-report-of-2-novel-mutations-131159

Üçüncülük Ödülü

Effect of Cross-Sex Hormone Therapy on Hematological Parameters in Transmen: A 1-Year Follow-up Study

Onur Elbasan[1], Özlem Üstay[2]

[1]Department of Endocrinology and Metabolism, Sinop Atatürk State Hospital, Sinop, Turkey
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https://endocrinolrespract.org/en/effect-of-cross-sex-hormone-therapy-on-hematological-parameters-in-transmen-a-1-year-follow-up-study-131184

TEMD 60 YAŞINDA

Derneğimizin kuruluşunun 60. yılı, 45. Türkiye Endokrinoloji ve Metabolizma Hastalıkları Kongresi sırasında coşkuyla kutlandı. Kuruluşumuzdan bu güne kadar derneğimize hizmet eden; gelişmesine, büyümesine ve bu günlere gelmesine katkıda bulunan başkanlarımız, yönetim kurulu üyelerimiz ve tüm üyelerimize teşekkür eder, saygılarımızı sunarız.

45. Türkiye Endokrinoloji ve Metabolizma Hastalıkları Kongresi sırasında basın bildirisi düzenlendi.

Basın mensuplarının endokrinolojide sık karşılaşılan konular hakkındaki soruları yanıtlandı.

Derneğimizin başlatmış olduğu Mentörlük Programının birinci yıl sonuçları paylaşıldı.

TİROİD USG KURSU TAMAMLANDI

Tiroid USG Kursu 27 Nisan 2024 tarihinde İzmir'de tamamlandı. Toplantıya 72 meslektaşımız katıldı. Emeği geçen tüm üyelerimize teşekkür eder, saygılarımızı sunarız.

22. OBEZİTE, DİSLİPİDEMİ VE HİPERTANSİYON EĞİTİM SEMPOZYUMU TAMAMLANDI

22. Obezite, Dislipidemi ve Hipertansiyon Eğitim Sempozyumu 4-5 Mayıs 2024 tarihinde Mardin'de gerçekleştirildi. Sempozyuma 110 meslektaşımız katıldı. Ayrıca TEMD Yönetim Kurulu üyeleri ile birinci, ikinci ve üçüncü basamakta görev yapmakta olan meslektaşlarımızın bir araya geldiği bir panelde obezite, dislipidemi ve hipertansiyon yönetimi ile ilgili pratik hayatta yaşanan problemler ve çözüm önerileri tartışıldı. Emeği geçen tüm üyelerimize teşekkür eder, saygılarımızı sunarız.

26. AVRUPA ENDOKRİNOLOJİ KONGRESİ (ECE 2024) TAMAMLANDI

Avrupa Endokrinoloji Derneği (ESE)'nin düzenlediği 26. Avrupa Endokrinoloji Kongresi 11-14 Mayıs 2024 tarihlerinde Stockholm'de gerçekleşti. Kongreye Derneğimizi temsilen Başkanımız Prof. Dr. Mustafa Cesur katıldı. Kongre sırasında Avrupa Board Sınavı Soru Hazırlama Komitesi çalışmaları yapıldı. Aynı zamanda Avrupa Hormon Günü etkinliklerini içeren videoda ülkemizde yapılan etkinliklere de yer verildi.

State of Endocrinology başlangıç toplantısı yine kongre sırasında yapıldı.

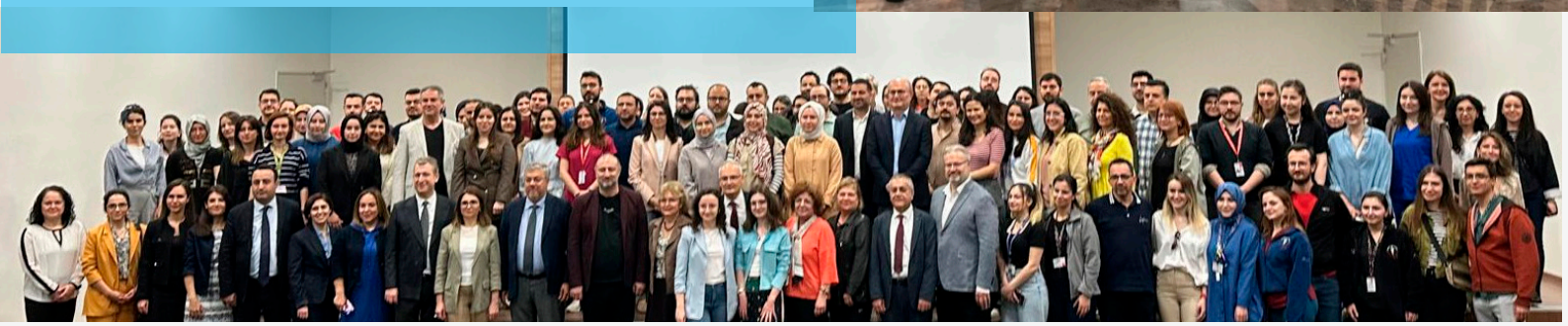
Kongrenin son günü yapılan ESE Genel Kuruluna Dernek Başkanımız tarafından katılım sağladı.

UEMS ENDOCRINOLOGY ANNUAL ASSEMBLY TAMAMLANDI

Avrupa Tıp Uzmanları Birliği'nin yıllık toplantısı bu yıl Derneğimizin ev sahipliğinde 24-26 Mayıs 2024 tarihinde İstanbul'da gerçekleştirildi.

TİROKURS-29 TAMAMLANDI

Tirokurs-29, 25 Mayıs 2024 tarihinde Dünya Tiroid Günü'nde Ankara'da tamamlandı. Kursa 145 meslektaşımız katıldı. Emeği geçen tüm üyelerimize teşekkür eder, saygılarımızı sunarız.



11. ADRENAL GONAD VE NÖROENDOKRİN TÜMÖRLER SEMPOZYUMU TAMAMLANDI

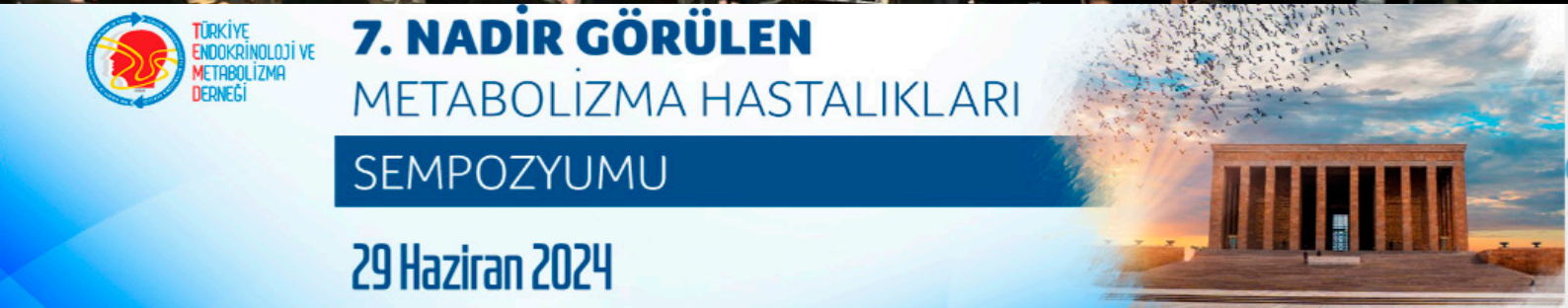
11. Adrenal Gonad ve Nöroendokrin Tümörler Sempozyumu 31 Mayıs - 1 Haziran 2024 tarihinde Diyarbakır'da gerçekleştirildi. Sempozyuma 105 kişi yüzyüze, 203 kişi çevrimiçi olarak, toplamda 308 meslektaşımız katıldı. Emeği geçen tüm üyelerimize teşekkür eder, saygılarımızı sunarız.

CEDA 2024 TAMAMLANDI

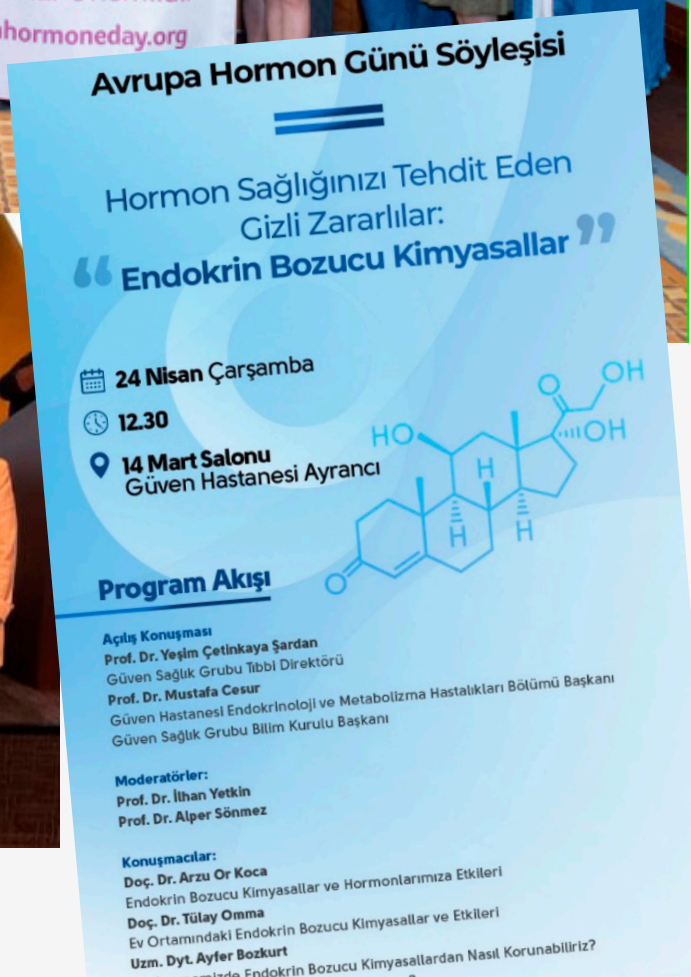
Düzenleme komitesinde Prof. Dr. Mustafa Cesur ve Prof. Dr. Alper Sönmez'in de bulunuğu "Annual Congress of Central Europe Diabetes Association" (CEDA 2024) 6-8 Haziran 2024 tarihinde İtalya'da gerçekleştirildi. Kongre bilimsel programında TEMD-CEDA ortak sempozyumuna da yer verildi.

7. NADİR GÖRÜLEN METABOLİZMA HASTALIKLARI SEMPOZYUMU TAMAMLANDI

7. Nadir Görülen Metabolizma Hastalıkları Sempozyumu 29 Haziran 2024 tarihinde Ankara'da gerçekleştirildi. Sempozyuma 114 meslektaşımız katıldı. Emeği geçen tüm üyelerimize teşekkür eder, saygılarımızı sunarız.



AVRUPA HORMON GÜNÜ ETKİNLİKLERİ



Ankara Güven Hastanesi Endokrin Bozucu Kimyasallar Paneli

Moderatörler: Prof. Dr. İlhan Yetkin, Prof. Dr. Alper Sönmez

TEMD Endokrin Akademi Eğitim Platformu Canlı Yayın Etkinliği

312 katılımcı, 32 yorum ve katkı

Avrupa Hormon günü nedeniyle derneğimiz tarafından bilgilendirme videosu hazırlanmış ve sosyal medya hesaplarımızda paylaşılmıştır.

https://www.instagram.com/reel/C6JLmPgoG-l/?igsh=MXFtNzd1aXBibzAxYw

Derneğimiz Başkan Yardımcısı Prof. Dr. Ayşe Kubat Üzüm Avrupa Hormon Günü etkinlikleri kapsamında 10haber ile söyleşi yapmıştır.

Derneğimiz Endokrin Bozucular Komisyonu Başkanı Prof. Dr. İlhan Yetkin Avrupa Hormon Günü etkinlikleri kapsamında Net Haberim ile söyleşi yapmıştır.

Ülkemizde çeşitli merkezlerde etkinlikler ve sosyal medya paylaşımları yapılmıştır.

DÜNYA TİROİD GÜNÜ ETKİNLİKLERİ

25 Mayıs Dünya Tiroid Günü etkinlikleri kapsamında Tiroid Bilimsel Çalışma Grubu Başkanımız Prof. Dr. Mustafa Şahin tarafından hazırlanan bilgilendirme videosu sosyal medya hesaplarımızdan yayınlanmıştır.

25 Mayıs Dünya Tiroid Günü etkinlikleri kapsamında Derneğimiz Başkan Yardımcısı Prof. Dr. Ayşe Kubat Üzüm Medimagazin ile söyleşi yapmıştır. Haberin tamamına linkten ulaşabilirsiniz.

Medimagazin

ANA SAYFA KORONAVİRÜS GÜNCEL HEKİM DİŞ HEKİMİ ECZACI SAĞLIK ÇALIŞANI İLAÇ SANAYİ

Hekim › Tiroid hastalıklarının sıklığı toplumlar arasında farklılık gösteriyor

Tiroid hastalıklarının sıklığı toplumlar arasında farklılık gösteriyor

Türkiye Endokrinoloji ve Metabolizma Derneği Başkan Yardımcısı Prof. Dr. Ayşe Kubat Üzüm, tiroid hastalıklarının görülme sıklığının toplumlar arasında farklılık gösterdiğini ifade ederek, "Tiroid nodülleri oldukça sıktır ve ultrasonografi ile neredeyse her iki kişiden birinde nodül saptanabilir. Hipotiroidi kadınlarda daha sıktır ve sıklığı yaşla birlikte artar; 60 yaş üzerindeki her 10 kadından birinde subklinik hipotiroidi görülür. En sık sebebi Hashimoto tiroiditidir. Hipertiroidi daha nadir görülür." dedi.

Kaynak: MEDİMAGAZİN 25.05.2024 11:39

ÇALIŞMA GRUBU TOPLANTILARIMIZ

ERKEN KARİYER GRUBU ENDOKRİN KARİYER TOPLANTILARIMIZ...

ENDOKRİN AKADEMİ

CANLI YAYINLARIMIZ

ENDOKRİN AKADEMİ

YENİ MODÜLLERİMİZ

SOSYAL MEDYA PAYLAŞIMLARIMIZ


1 Mayıs
Emek ve Dayanışma Günü
Kutlu Olsun
TÜRKİYE ENDOKRİNOLOJİ VE METABOLİZMA DERNEĞİ


Karşılıksız Sevgi ve
Fedakarlıklarıyla
Bizleri Büyüten
Annelerimizin
Anneler Günü
Kutlu Olsun
TÜRKİYE ENDOKRİNOLOJİ VE METABOLİZMA DERNEĞİ


12 - 18 MAYIS
HEMŞİRELİK
HAFTASI
Kutlu Olsun


19MAYIS
ATATÜRK'Ü ANMA
GENÇLİK VE SPOR BAYRAMI
Kutlu Olsun
TÜRKİYE ENDOKRİNOLOJİ VE METABOLİZMA DERNEĞİ


Sağlıklı yaşamın
temellerini oluşturan diyetisyenlerimizin
Diyetisyenler Günü
Kutlu Olsun
6 Haziran
TÜRKİYE ENDOKRİNOLOJİ VE METABOLİZMA DERNEĞİ


Babalar Gününüz
Kutlu Olsun
TÜRKİYE ENDOKRİNOLOJİ VE METABOLİZMA DERNEĞİ


Sağlıklı ve Huzurlu
Bir Bayram Dileriz
TÜRKİYE ENDOKRİNOLOJİ VE METABOLİZMA DERNEĞİ

Kongre, Kurslar ve Sempozyumlar

ULUSAL VE ULUSLARARASI BİLİMSEL KONGRE VE SEMPOZYUMLAR

- 6-8 Eylül 2024
  11th ESE Young Endocrinologists & Scientists (EYES) Meeting
  Helsinki, Finland
  https://www.ese-hormones.org/education-and-training/ese-events-webinars/eyes-annual-meeting/eyes-annual-meeting-2024/

- 7-10 Eylül 2024
  46th Annual Meeting of the European Thyroid Association
  Athens, Greece
  https://www.eurothyroid.com/

- 9-13 Eylül 2024
  60th Annual Meeting - European Association for the Study of the Diabetes
  Madrid, Spain
  https://www.easd.org/annual-meeting/easd-2024.html

- 11-13 Eylül 2024
  21st Congress of the European Neuroendocrine Association (ENEA 2024
  Sevilla, Spain
  https://enea2024.com/

- 24-26 Eylül 2024
  ESE Clinical Update on Adrenal and Cardiovascular Endocrinology 2024 (Online)
  https://www.ese-hormones.org/education-and-training/events-key-dates/ese-clinical-update-on-adrenal-and-cardiovascular-endocrinology-2024/

- 25-29 Eylül 2024
  Kardiyovasküler Hastalıklara Multidisipliner Yaklaşım Kongresi
  Concorde Kongre Merkezi,Bafra-KKTC
  https://www.tgkvmultidisipliner.org/

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

- 30 Ekim-3 Kasım 2024
  2024 Annual Meeting of the American Thyroid Association (ATA)
  Chicago, IL, USA
  https://www.thyroid.org/2024-annual-meeting/

- 31 Ekim-3 Kasım 2024
  ENDOKURS 8
  Double Tree By Hilton, Şanlıurfa
  https://www.temdendokurs.org/

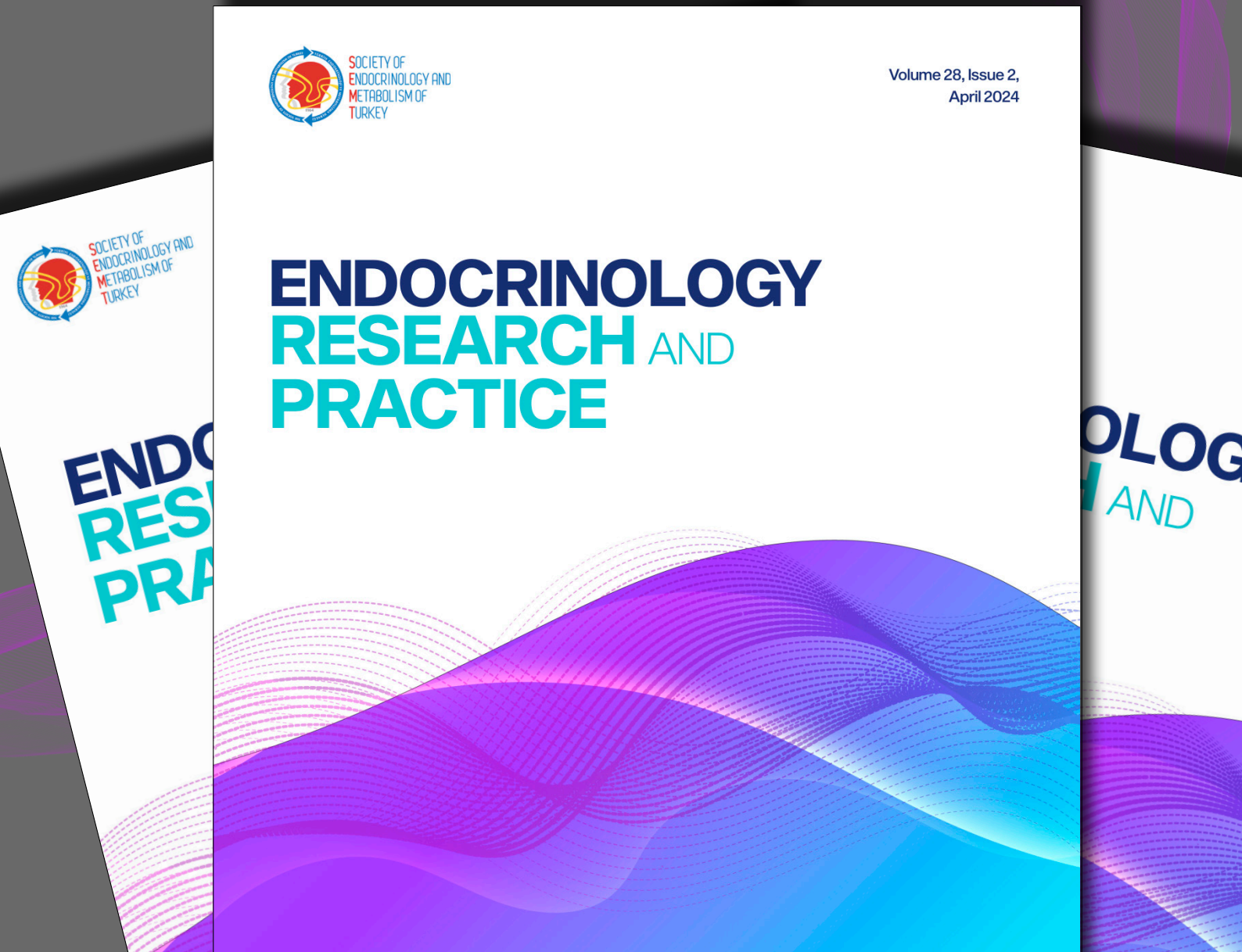
- 30 Nisan-4 Mayıs 2025
  46. Türkiye Endokrinoloji ve Metabolizma Hastalıkları Kongresi
  Susesi Hotel, Antalya
  https://www.temd.org.tr/

DUYURULAR

ENDOCRINOLOGY RESEARCH and PRACTICE

NİSAN 2024 SAYISI YAYINLANDI

"Endocrinology Research and Practice'in Nisan 2024 sayısı, dergimizin web sayfasında yayınlanmıştır.
https://endocrinolrespract.org/EN/april-2024-00122



"DİABETES MELLİTUS VE KOMPLİKASYONLARININ TANI, TEDAVİ VE İZLEM KILAVUZU 2024" GÜNCELLENDİ

"Diabetes Mellitus ve Komplikasyonlarının Tanı, Tedavi ve İzlem Kılavuzu 2024" güncellenmiş ve web sayfamızda yayınlanmaya başlamıştır. Kılavuza ulaşmak için lütfen tıklayınız.

Emekleri için Diabetes Bilimsel Çalışma Grubu Başkanı Prof. Dr. Canan Ersoy'a ve katkıda bulunan üyelerimize teşekkür ederiz.

ENDOCAST

Derneğimiz podcast kayıtları için "ENDOCAST" marka adı ile yapılan patent başvurumuz tamamlanmış ve adımıza onaylanmıştır.

ÜYELERİMİZDEN DUYURULAR

AKADEMİK YÜKSELMELER

- Uzm. Dr. Mutlu Güneş
- Uzm. Dr. Zuhal Karaca Karagöz
  Doçentliğe yükselmişlerdir.

Üyelerimizi tebrik eder, başarılarının devamını dileriz.

YENİ ÜYELER

LOKMAN HEKİM ÇEVİK	Bursa Yüksek İhtisas Eğitim ve Araştırma Hastanesi, Endokrinoloji ve Metabolizma Hastalıkları Kliniği, Bursa
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FATMA ÖKTEM	Kocaeli Üniversitesi Tıp Fakültesi, Endokrinoloji ve Metabolizma Hastalıkları Bilim Dalı, Kocaeli

ÜYELERİMİZDEN LİTERATÜR SEÇMELERİ

Pelvis Magnetic Resonance Imaging to Diagnose Familial Partial Lipodystrophy

Suleyman Cem Adiyaman[1], Canan Altay[2], Berfu Y Kamisli[3], Emre Ruhat Avci[2], Isil Basara[2], Ilgin Yildirim Simsir[4], Tahir Atik[5], Mustafa Secil[2], Elif A Oral[6], Baris Akinci[7]

J Clin Endocrinol Metab. 2023 Jul 14;108(8):e512-e520. doi: 10.1210/clinem/dgad063. PMID: 36808247 DOI: 10.1210/clinem/dgad063

Context: The diagnosis of familial partial lipodystrophy (FPLD) is currently made based on clinical judgment.

Objective: There is a need for objective diagnostic tools that can diagnose FPLD accurately.

Methods: We have developed a new method that uses measurements from pelvic magnetic resonance imaging (MRI) at the pubis level. We evaluated measurements from a lipodystrophy cohort (n = 59; median age [25th-75th percentiles]: 32 [24-44]; 48 females and 11 males) and age- and sex-matched controls (n = 29). Another dataset included MRIs from 289 consecutive patients.

Results: Receiver operating characteristic curve analysis revealed a potential cut-point of ≤13 mm gluteal fat thickness for the diagnosis of FPLD. A combination of gluteal fat thickness ≤13 mm and pubic/gluteal fat ratio ≥2.5 (based on a receiver operating characteristic curve) provided 96.67% (95% CI, 82.78-99.92) sensitivity and 91.38% (95% CI, 81.02-97.14) specificity in the overall cohort and 100.00% (95% CI, 87.23-100.00) sensitivity and 90.00% (95% CI, 76.34-97.21) specificity in females for the diagnosis of FPLD. When this approach was tested in a larger dataset of random patients, FPLD was differentiated from subjects without lipodystrophy with 96.67% (95% CI, 82.78-99.92) sensitivity and 100.00% (95% CI, 98.73-100.00) specificity. When only women were analyzed, the sensitivity and the specificity was 100.00% (95% CI, 87.23-100.00 and 97.95-100.00, respectively). The performance of gluteal fat thickness and pubic/gluteal fat thickness ratio was comparable to readouts performed by radiologists with expertise in lipodystrophy.

Conclusion: The combined use of gluteal fat thickness and pubic/gluteal fat ratio from pelvic MRI is a promising method to diagnose FPLD that can reliably identify FPLD in women. Our findings need to be tested in larger populations and prospectively.

Genetic Testing in Hereditary Pituitary Tumors

Gamze Akkuş[1], Márta Korbonits[2]

Arch Med Res. 2023 Dec;54(8):102920. doi: 10.1016/j.arcmed.2023.102920. PMID: 38007383 DOI: 10.1016/j.arcmed.2023.102920

Genetic testing is becoming part of mainstream endocrinology. An increasing number of rare and not-so-rare endocrine diseases have an identifiable genetic cause, either at the germline or at the somatic level. Here we summerise germline genetic alterations in patients with pituitary neuroendocrine tumors (pituitary adenomas). These may be disorders with isolated pituitary tumors, such as X-linked acrogigantism, or AIP-related pituitary tumors, or as part of syndromic diseases, such as multiple endocrine neoplasia type 1 or Carney complex. In some cases, this could be relevant for treatment choices and follow-up, as well as for family members, as cascade screening leads to early identification of affected relatives and improved clinical outcomes.

Newly-onset Autoimmune Diabetes Mellitus Triggered by COVID 19 Infection: A Case-based Review

Gamze Akkuş[1]

Endocr Metab Immune Disord Drug Targets . 2023;23(7):887-893. doi:10.2174/2666145415666221004111511. PMID: 36200218 DOI: 10.2174/2666145415666221004111511

The devastating global pandemic Coronavirus disease 2019 (COVID 19) isolated in China in January 2020 is responsible for an outbreak of pneumonia and other multisystemic complications. The clinical picture of the infection has extreme variability: it goes from asymptomatic patients or mild forms with fever, cough, fatigue and loss of smell and taste to severe cases ending up in the intensive care unit (ICU). This is due to a possible cytokine storm that may lead to multiorgan failure, septic shock, or thrombosis. Severe Acute Respiratory Syndrome coronavirus 2 (SARS-CoV -2), which is the virus that causes COVID 19, binds to angiotensin-converting enzyme 2 (ACE2) receptors, which are expressed in key metabolic organs and tissues, including pancreatic beta cells, adipose tissue, the small intestine and the kidneys. Therefore it is possible to state that newly-onset diabetes is triggered by COVID 19 infection. Although many hypotheses have clarified the potential diabetogenic effect of COVID 19, a few observations were reported during this pandemic. Two male patients admitted to us with devastating hyperglycemia symptoms were diagnosed with type 1/autoimmune diabetes mellitus within 3 months following COVID 19 infection. Autoantibodies and decreased C peptide levels were detected in these patients. We speculated that several mechanisms might trigger autoimmune insulitis and pancreatic beta-cell destruction by COVID 19 infection. We aim to raise awareness of the possible link between SARS-CoV-2 and newly onset type 1 diabetes mellitus. Further studies are needed to determine a more definitive link between the two clinical entities.

Inadequate Gonadal Replacement in Patients with Turner Syndrome May Result in Pituitary Volume Enlargement

Gamze Akkus[1], Irem Kolsuz[2], Sinan Sozutok[3], Bilen Onan[3], Barıs Karagun[1], Mehtap Evran[1], Murat Sert[1], Tamer Tetiker[1]

Curr Med Imaging. 2023 Feb 23. doi: 10.2174/1573405619666230223170130.PMID: 36825729 DOI: 10.2174/1573405619666230223170130

Objectives: Patients with Turner syndrome need hormone replacement therapy for puberty induction. However, it is not known whether inadequate hormone replacement therapy affects the pituitary.

Design and patients: Patients with Turner syndrome (n=35) and healthy control (n=20) (age/gender matched) subjects were included. MRI imaging of the pituitary was used to calculate pituitary volumes. According to the estradiol regimen, patients were divided into two groups; (i) those treated with low-dose conjugated oestrogen (CE, 0.625 mg) and (ii) those treated with combination therapy (ethinyl estradiol+sipropterone acetate; 35 mcg/2 mg). Pituitary measurements were calculated according to pituitary borders and their distances to each other via pituitary MRI.

Results: Pituitary hyperplasia (0.58±0.15 cm3 vs. 0.40±0.17 cm3) was determined in patients with low dose conjugated estrogen compared to the other patients or healthy control subjects (0.42±0.16 cm3) (p=0.005). Serum FSH levels of the patients treated with low dose CE were also higher compared to the patients who received combination therapy (p=0.001).

Conclusion: Inadequate hormone replacement therapy can cause devastating effects on the bones and uterine health and disrupts the pituitary structure.

Alterations of Cardiometabolic Risk Profile In Polycystic Ovary Syndrome: 13 Years Follow-Up in An Unselected Population

S. Aksun[1], N.C Sonu[2], S. Aygun[3], U.N Karakulak[3], S. Mumusoglu[2], B.O Yildiz[4,5]

J Endocrinol Invest. 2023 Nov 6. doi: 10.1007/s40618-023-02230-0. PMID: 37930586 DOI: 10.1007/s40618-023-02230-0

Purpose: Cardiometabolic risk factors are common in women with polycystic ovary syndrome (PCOS) during reproductive years. The aim of this study was to determine the impact of aging on cardiometabolic risk of the syndrome by examining women who had previously been diagnosed to have PCOS or to be healthy in an unselected population in 2009.

Participants: Forty-one women with PCOS who were diagnosed and phenotyped according to the Rotterdam criteria and 43 age- and body mass index (BMI)-matched healthy women from the same unselected cohort.

Methods: All participants were evaluated by structured interview, physical examination, anthropometric, hormonal and biochemical measurements. Additionally, body composition analyses and echocardiographic assessments of 30 women with PCOS and 30 control women were conducted at 13 years of follow-up.

Results: There was no difference between the patient and the control groups in terms of anthropometric and body composition measures and metabolic parameters. Echocardiographic assessment showed similar systolic functions, strain measurements and epicardial fat measurements between the groups. PCOS patients still had higher levels of total testosterone, free androgen index (FAI) and dehydroepiandrosterone sulfate (DHEAS) levels compared to controls. Epicardial fat thickness showed positive correlations with BMI, total and truncal body fat, homeostatic model assessment for insulin resistance (HOMA-IR) and free androgen index (FAI).

Conclusions: Aging women with PCOS in the population have higher androgen levels and similar cardiometabolic risk profile compared to age- and BMI-matched healthy women. Epicardial fat thickness, a marker of cardiometabolic risk, appear to be associated with hyperandrogenism. Further research is needed on larger community-based cohorts where older patients are assessed with a longer follow-up.

Evaluation of Prognosis and Risk Factors of Differentiated Thyroid Cancer in A Geriatric Population

Feride Pınar Altay[1], Özgün Çiçek[2], Ecem Demirkan[2], Işılay Taşkaldıran[1], Yusuf Bozkuş[1], Özlem Turhan İyidir[1], Aslı Nar[1], Neslihan Başçıl Tütüncü[1]

Turkish Journal of Geriatrics. DOI: 10.29400/tjgeri.2023.337. 2023; 26(2):118–123 http://www.geriatri.dergisi.org/uploads/pdf/pdf_TJG_1381.pdf

Introduction: This retrospective study aimed to investigate the clinical and pathological features of differentiated thyroid cancer and to evaluate treatment outcomes in older adults.

Materials and Methods: Data from 1077 patients with differentiated thyroid cancer were noted. These patients were divided into two groups, aged <65 years and aged ≥ 65 years, and the clinicopathological features of each were compared.

Results: Of the 1077 patients, 913 (85%) were under 65 years of age and the remaining 164 (15%) were aged ? 65 years. Of those aged <65 years, 652 (71.4%) had papillary thyroid carcinoma and 261 (28.6%) had follicular thyroid carcinoma. Of the patients aged ≥65 years, 116 (70.7%) had papillary thyroid carcinoma and 48 (29.3%) had follicular thyroid carcinoma. The primary tumour size was significantly larger and the incidences of vascular invasion, lymph node metastasis, and distant metastasis were significantly higher in patients aged ≥65 years than in the younger patients (p<0.001, p<0.001, p=0.001, and p=0.002, respectively). There was no noteworthy difference between the two groups in terms of the number of tumours, tumour bilaterality, multifocality, and extravascular invasion (p=0.860, p=0.590, p=0.404, and p=0.110, respectively).

Conclusion: Primary tumour size was significantly larger and the incidences of vascular invasion, lymph node metastasis, and distant metastasis were significantly higher in patients aged ≥ 65 years. Older patients with differentiated thyroid cancer have worse pathologic features at the time of diagnosis therefore need more aggressive treatment such as more frequent and higher doses of radioiodine treatment.

The Significance of Finerenone As a Novel Therapeutic Option in Diabetic Kidney Disease: A Scoping Review with Emphasis on Cardiorenal Outcomes of The Finerenone Phase 3 Trials

Mustafa Arici[1], Bulent Altun[1], Mustafa Araz[2], Aysegul Atmaca[3], Tevfik Demir[4], Tevfik Ecder[5], Galip Guz[6], Dilek Gogas Yavuz[7], Alaattin Yildiz[8], Temel Yilmaz[9]

Front Med (Lausanne). 2024 Jun 14:11:1384454. doi: 10.3389/fmed.2024.1384454. eCollection 2024.

This scoping review prepared by endocrinology and nephrology experts aimed to address the significance of finerenone, as a novel therapeutic option, in diabetic kidney disease (DKD), based on the biological prospect of cardiorenal benefit due to non-steroidal mineralocorticoid receptor antagonist (MRA) properties, and the recent evidence from the finerenone phase 3 program clinical trials. The importance of finerenone in slowing DKD progression was critically reviewed in relation to the role of MR overactivation in the pathogenesis of cardiorenal disease and unmet needs in the current practice patterns. The efficacy and safety outcomes of finerenone phase III study program including FIDELIO-DKD, FIGARO-DKD and FIDELITY were presented. Specifically, perspectives on inclusion of patients with preserved estimated glomerular filtration rate (eGFR) or high albuminuria, concomitant use of sodium-glucose co-transporter-2 inhibitor (SGLT2i) or glucagon-like peptide 1 receptor agonist (GLP-1 RA), baseline glycated hemoglobin (HbA1c) level and insulin treatment, clinically meaningful heart failure outcomes and treatment-induced hyperkalemia were addressed. Finerenone has emerged as a new therapeutic agent that slows DKD progression, reduces albuminuria and risk of cardiovascular complications, regardless of the baseline HbA1c levels and concomitant treatments (SGLT2i, GLP-1 RA, or insulin) and with a favorable benefit-risk profile. The evolving data on the benefit of SGLT2is and non-steroidal MRAs in slowing or reducing cardiorenal risk seem to provide the opportunity to use these pillars of therapy in the management of DKD, after a long-period of treatment scarcity in this field. Along with recognition of the albuminuria as a powerful marker to detect those patients at high risk of cardiorenal disease, these important developments would likely to impact standard-of-care options in the setting of DKD.

Expert Opinion on Screening, Diagnosis and Management of Diabetic Peripheral Neuropathy: A Multidisciplinary Approach

Aysegul Atmaca[1], Aysegul Ketenci[2], Ibrahim Sahin[3], Ihsan Sukru Sengun[4], Ramazan Ilyas Oner[5], Hacer Erdem Tilki[6], Mine Adas[7], Hatice Soyleli[8], Tevfik Demir[9]

Front Endocrinol (Lausanne). 2024 Jun 17:15:1380929. doi: 10.3389/fendo.2024.1380929. eCollection 2024.

The proposed expert opinion aimed to address the current knowledge on conceptual, clinical, and therapeutic aspects of diabetic peripheral neuropathy (DPN) and to provide a guidance document to assist clinicians for the best practice in DPN care. The participating experts consider the suspicion of the disease by clinicians as a key factor in early recognition and diagnosis, emphasizing an improved awareness of the disease by the first-admission or referring physicians. The proposed "screening and diagnostic" algorithm involves the consideration of DPN in a patient with prediabetes or diabetes who presents with neuropathic symptoms and/or signs of neuropathy in the presence of DPN risk factors, with careful consideration of laboratory testing to rule out other causes of distal symmetric peripheral neuropathy and referral for a detailed neurological work-up for a confirmative test of either small or large nerve fiber dysfunction in atypical cases. Although, the first-line interventions for DPN are currently represented by optimized glycemic control (mainly for type 1 diabetes) and multifactorial intervention (mainly for type 2 diabetes), there is a need for individualized pathogenesis-directed treatment approaches for DPN. Alpha-lipoic acid (ALA) seems to be an important first-line pathogenesis-directed agent, given that it is a direct and indirect antioxidant that works with a strategy targeted directly against reactive oxygen species and indirectly in favor of endogenous antioxidant capacity for improving DPN conditions. There is still a gap in existing research in the field, necessitating well-designed, robust, multicenter clinical trials with sensitive endpoints and standardized protocols to facilitate the diagnosis of DPN via a simple and effective algorithm and to track progression of disease and treatment response. Identification of biomarkers/predictors that would allow an individualized approach from a potentially disease-modifying perspective may provide opportunities for novel treatments that would be efficacious in early stages of DPN, and may modify the natural course of the disease. This expert opinion document is expected to increase awareness among physicians about conceptual, clinical, and therapeutic aspects of DPN and to assist them in timely recognition of DPN and translating this information into their clinical practice for best practice in the management of patients with DPN.

Effects of Irisin and Exercise on Adropin and Betatrophin in a New Metabolic Syndrome Model

Suna Aydin[1,2,3], Faruk Kilinc[4], Kader Ugur[4], Mustafa Ata Aydin[5], Mehmet Hanifi Yalcin[3], Tuncay Kuloglu[6], Nalan Kaya Tektemur[6], Serdal Albayrak[7], Elif Emre[2], Meltem Yardim[8], Ramazan Fazil Akkoc[2], Serhat Hancer[6], İbrahim Sahin[9,10], Vedat Cinar[11], Taner Akbulut[12], Selcuk Demircan[13], Bahri Evren[14], Berrin Tarakci Gencer[3], Aziz Aksoy[15], Merve Yilmaz Bozoglan[16], İsa Aydemir[11], Suleyman Aydin[9]

Biotech Histochem. 2023 Nov 7:1-12. doi: 10.1080/10520295.2023.2276205.PMID: 37933453 DOI: 10.1080/10520295.2023.2276205

Metabolic syndrome (MetS) is a prevalent public health problem. Uric acid (UA) is increased by MetS. We investigated whether administration of UA and 10% fructose (F) would accelerate MetS formation and we also determined the effects of irisin and exercise. We used seven groups of rats. Group 1 (control); group 2 (sham); group 3 (10% F); group 4 (1% UA); group 5 (2% UA); group 6 (10% F + 1% UA); and Group 7, (10% F + 2% UA). After induction of MetS (groups 3 -7), Group 3 was divided into three subgroups: 3A, no further treatment; 3B, irisin treatment; 3C, irisin treatment + exercise. Group 4, 1% UA, which was divided into three subgroups: 4A, no further treatment; 4B, irisin treatment; 4C, Irisin treatment + exercise. Group 5, 2% UA, which was divided into three subgroups: 5A, no further treatment; 5B, irisin treatment; 5C, irisin treatment + exercise. Group 6, 10% F + 1% UA, which was divided into three subgroups: 6A, no further treatment; 6B, irisin treatment; 6C, irisin treatment + exercise. Group 7, 10% F + 2% UA, which was divided into three subgroups: 7A, no further treatment; 7B, irisin treatment; 7C, irisin treatment + exercise., İrisin was administered 10 ng/kg irisin intraperitoneally on Monday, Wednesday, Friday, Sunday each week for 1 month. The exercise animals (in addition to irisin treatment) also were run on a treadmill for 45 min on Monday, Wednesday, Friday, Sunday each week for 1 month. The rats were sacrificed and samples of liver, heart, kidney, pancreas, skeletal muscles and blood were obtained. The amounts of adropin (ADR) and betatrophin in the tissue supernatant and blood were measured using an ELISA method. Immunohistochemistry was used to detect ADR and betatrophin expression in situ in tissue samples. The duration of these experiments varied from 3 and 10 weeks. The order of development of MetS was: group 7, 3 weeks; group 6, 4 weeks; group 5, 6 weeks; group 4, 7 weeks; group 3, 10 weeks. Kidney, liver, heart, pancreas and skeletal muscle tissues are sources of adropin and betatrophin. In these tissues and in the circulation, adropin was decreased significantly, while betatrophin was increased significantly due to MetS; irisin + exercise reversed this situation. We found that the best method for creating a MetS model was F + UA2 supplementation. Our method is rapid and simple. Irisin + exercise was best for preventing MetS.

Immunohistochemical and Clinical Assessment of Low-Risk Thyroid Tumors

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Objective: Differential diagnosis and prognosis of low-risk follicular cell-derived thyroid neoplasms have been conflicting. We aimed to evaluate immunohistochemical features and prognosis of tumors in "well-differentiated tumor of uncertain malignant potential" and "noninvasive follicular thyroid neoplasm with papillary-like nuclear features" categories.

Methods: Fifty-two low-risk thyroid tumors which were classified as well-differentiated tumor of uncertain malignant potential (n=23) and noninvasive follicular thyroid neoplasm with papillary-like nuclear features (n=29) with a follow-up of at least 60 months were included. Galectin-3, HBME-1, CK19, and CD56 expressions were evaluated. The control group included benign nodules (n=53), conventional papillary thyroid carcinomas (n=37), and encapsulated follicular variant papillary thyroid carcinomas (n=60).

Results: During a median 84 months follow-up period, none of the patients experienced a recurrence of tumor. Expression of HBME-1 in low-risk tumors was significantly frequent than benign and infrequent than malignant tumors (P=.001 and P < .001, respectively). The frequency of galectin-3 positivity was similar between low-risk and malignant tumors (P=.805) and significantly higher in low-risk tumors when compared to benign nodules (P < .001). Expression of CK19 in low-risk tumors was significantly frequent than benign nodules and infrequent than malignant tumors (P=.01 and P=.001, respectively). The expression profile of CD56 was similar in benign nodules and low-risk tumors (P=.361). Total loss of CD56 in tumor was the most specific marker of malignancy (100%). Positive staining of HMBE-1 was the most sensitive marker (89.7%) for predicting malignancy.

Conclusion: Low-risk thyroid tumors had immunohistochemical features overlapping with both benign and malignant thyroid tumors and had a benign course of disease during a long follow-up period.

The Sonographer's and Pathologist's Perspective of Echogenic Microfoci in Papillary Thyroid Carcinoma

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Objective: Punctate echogenic foci (PEF)/microcalcifications are thought to represent psammoma bodies (PB) in histopathology. However, there are few and contradictory data on this. Different types of sonographic echogenic microfoci (EMF) are seen in papillary thyroid carcinoma (PTC), and their histopathological equivalents are not clearly known. There is also conflicting data on the interobserver agreement between the sonographers on EMF.

Methods: We prospectively collected US video records of PTC nodules with and without EMF in two large thyroid centers. All video recordings were independently interpreted by three blinded, experienced sonographers. EMF were classified as true microcalcifications (punctate echogenic foci (PEF) ≤1 mm long), linear microechogenities (>1 mm long, posterior acoustic enhancement of the back wall of a microcystic area), comet-tail artifacts/reverberations or linear microechogenities with comet-tail artifacts/reverberations, non-shadowing coarse echogenic foci (>1 mm nonlinear areas) and unclassifiable. Histopathological evaluation was performed by two blinded, qualified pathologists.

Results: A total of 114 malignant nodules were included. The average Cohen's kappa (κ) of three sonographers for the EMF presence was 0.775, indicating substantial agreement. A substantial agreement for PEF with 0.658 κ, only fair agreement for other types of EMF with 0.052 to 0.296 κ were detected. EMF were significantly associated with PB and papillae. PEF had an evident relationship with PB in multivariate analysis. There was a strong positive correlation between the amount of PEF and PB ($r = 0.634$, $P < 0.001$).

Conclusions: PEF in PTC mainly correspond to PB on histopathology. Although observation of EMF varies among sonographers, this inconsistency can be reduced by classifying EMF into subgroups and keeping the term 'PEF' only for true microcalcifications.

Insulin Resistance in Patients with Polycystic Ovary Syndrome is a Predictor of Fibromyalgia

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Objective: This study aims to investigate the frequency of fibromyalgia and its predictors in women with polycystic ovary syndrome (PCOS) and its relationship with insulin resistance, and to assess the effect of fibromyalgia on the anxiety and depressive symptoms in PCOS patients, and how the quality of life was affected by this combination.

Measurements: The study was conducted with 74 women with PCOS according to the Rotterdam criteria, which applied to our tertiary care clinic between January 2021 and January 2022, and 51 controls. Endocrinologic and rheumatologic examinations, biochemical and hormonal analyses, and radiologic imaging are made. Hospital anxiety and depression scale (HADs) and Short Form 36 (SF-36) quality of life scale were applied.

Results: There was no statistical difference between patients (n = 74 (23%)) and controls (n = 51 (13.7%)) in terms of fibromyalgia frequency. This frequency was 41.4% in PCOS patients with insulin resistance. The presence of insulin resistance was significantly higher in patients with PCOS and fibromyalgia (70.4%, 12 of 17 patients with fibromyalgia for the PCOS group; 8.3%, 1 of 7 patients with fibromyalgia for the control group) ($\chi^2 = 9.130$, $p=0.003$). Higher HOMA-IR levels ($B = 1.278$, $p = 0.034$) and age ($B = 1.134$, $p = 0.022$) were significant predictors of fibromyalgia in PCOS patients. Physical functioning ($U = 1.960$, $P = 0.050$), bodily pain subscales ($U = 2.765$, $p = 0.006$), and physical health summary measure ($U = 2.296$, $p = 0.022$) were significantly lower, VAS pain ($U = 5.145$, $p < 0.0001$) and fatigue ($U = 5.997$, $p < 0.0001$) scale scores were higher in PCOS patients with fibromyalgia.

Conclusions: Our results show that fibromyalgia is frequent in PCOS patients with insulin resistance.

The Impact of Classical Music on Anxiety and Pain Perception During a Thyroid Fine Needle Aspiration Biopsy

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Aim: To determine the impact of classical music on the anxiety and pain perception of patients who underwent thyroid fine-needle aspiration biopsy (TFNAB) for the first time.

Methods: In a prospective randomized controlled design, TFNAB patients were randomized into the intervention and control groups. The State Anxiety Inventory (SAI) before and after the procedure and the visual analog scale (VAS) after procedure were used for measuring anxiety and pain.

Results: A total of 82 patients were included. There was no significant difference between the music intervention group (n = 41) and control group (n = 41) in terms of age, gender, work status, highest education level, SAI score before TFNAB, and duration of the procedure ($p > 0.05$). It was observed that the anxiety level before TFNAB was higher in women in all patient groups ($p = 0.009$). While the SAI score decreased significantly in the music intervention group ($Z = - 3.62$, $p < 0.001$), there was no significant difference in the control group ($Z = - 1.41$, $p = 0.157$) after TFNAB. However, no significant difference was found in terms of VAS between two groups ($p = 0.075$). The duration of the TFNAB procedure was correlated with the change in the SAI score ($r = 0.382$, $p < 0.001$).

Conclusion: This is the first study to examine the impact of music on patients' anxiety and pain perception during the TFNAB procedure. Despite the fact that classical music intervention did not decrease pain perception, it significantly reduced patient anxiety. Music is an easy-to-implement intervention that can be considered as an effective method for reducing patient anxiety during TFNAB.

Subacute THYROiditis Related to SARS-CoV-2 VAccine and Covid-19 (THYROVAC Study): A Multicenter Nationwide Study

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Context: The aims of the study are to compare characteristics of subacute thyroiditis (SAT) related to different etiologies, and to identify predictors of recurrence of SAT and incident hypothyroidism.

Methods: This nationwide, multicenter, retrospective cohort study included 53 endocrinology centers in Turkey. The study participants were divided into either COVID-19-related SAT (Cov-SAT), SARS-CoV-2 vaccine-related SAT (Vac-SAT), or control SAT (Cont-SAT) groups.

Results: Of the 811 patients, 258 (31.8%) were included in the Vac-SAT group, 98 (12.1%) in the Cov-SAT group, and 455 (56.1%) in the Cont-SAT group. No difference was found between the groups with regard to laboratory and imaging findings. SAT etiology was not an independent predictor of recurrence or hypothyroidism. In the entire cohort, steroid therapy requirement and younger age were statistically significant predictors for SAT recurrence. C-reactive protein measured during SAT onset, female sex, absence of antithyroid peroxidase (TPO) positivity, and absence of steroid therapy were statistically significant predictors of incident (early) hypothyroidism, irrespective of SAT etiology. On the other hand, probable predictors of established hypothyroidism differed from that of incident hypothyroidism.

Conclusion: Since there is no difference in terms of follow-up parameters and outcomes, COVID-19- and SARS-CoV-2 vaccine-related SAT can be treated and followed up like classic SATs. Recurrence was determined by younger age and steroid therapy requirement. Steroid therapy independently predicts incident hypothyroidism that may sometimes be transient in overall SAT and is also associated with a lower risk of established hypothyroidism.

Corneal Parameters, Ocular Biometers, and Retinal and Choroidal Thickness in Acromegaly Patients

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Background: To compare ocular findings of acromegaly patients with healthy individuals and investigate the relation of serum levels of insulin-like growth factor (IGF-1) along with growth hormone (GH) and pituitary tumor (adenoma) dimensions (TD) with specific ocular parameters.

Methods: The ocular parameters of acromegaly patients (n = 38) were compared with those of healthy subjects (n = 36). These parameters were intraocular pressure, keratometric (K1-K2) values, central corneal thickness (CCT), total axial length along with anterior chamber-lens-vitreous length, retinal nerve fiber layer (RNFL) thickness, central foveal thickness (CFT), choroidal thickness (CT), ganglion cell layer thickness (GCLT), and inner plexiform layer thickness (IPLT). Also investigated was whether there was a correlation between disease duration, TD, GH, IGF-I, CCT, RNFL, CFT, GCLT, IPLT, and CT.

Results: The lens length of the acromegaly group was increased ($p = 0.014$). GH and IGF-1 levels were positively correlated with CT and CCT, respectively ($p = 0.041$, $r = 0.343$) ($p = 0.03$, $r = 0.347$). Analysis of TD also found a highly negative correlation with the mean RNFL thickness of the acromegaly patients ($p < 0.01$, $r = -0.603$). The mean value of the inner parts of GCLT and IPLT was negatively correlated with TD ($p = 0.041$, $r = -0.343$ and $p = 0.025$, $r = -0.379$, respectively).

Conclusion: Serum IGF-1 and GH levels might be determinant factors in CCT and CT, respectively. The pituitary adenoma size increasing may be prone to lead RNFL, ganglion cell layer, inner plexiform layer thinning. Increased lens thickness was found in the acromegaly group.

A National Multicenter Study of Leptin and Leptin Receptor Deficiency and Systematic Review

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Context: Homozygous leptin (LEP) and leptin receptor (LEPR) variants lead to childhood-onset obesity.

Objective: To present new cases with LEP and LEPR deficiency, report the long-term follow-up of previously described patients, and to define, based on all reported cases in literature, genotype-phenotype relationships.

Methods: Our cohort included 18 patients (LEP = 11, LEPR = 7), 8 of whom had been previously reported. A systematic literature review was conducted in July 2022. Forty-two of 47 studies on LEP/LEPR were selected.

Results: Of 10 new cases, 2 novel pathogenic variants were identified in LEP (c.16delC) and LEPR (c.40 + 5G > C). Eleven patients with LEP deficiency received metreleptin, 4 of whom had been treated for over 20 years. One patient developed loss of efficacy associated with neutralizing antibody development. Of 152 patients, including 134 cases from the literature review in addition to our cases, frameshift variants were the most common (48%) in LEP and missense variants (35%) in LEPR. Patients with LEP deficiency were diagnosed at a younger age [3 (9) vs 7 (13) years, P = .02] and had a higher median body mass index (BMI) SD score [3.1 (2) vs 2.8 (1) kg/m2, P = 0.02], which was more closely associated with frameshift variants (P = .02). Patients with LEP deficiency were more likely to have hyperinsulinemia (P = .02).

Conclusion: Frameshift variants were more common in patients with LEP deficiency whereas missense variants were more common in LEPR deficiency. Patients with LEP deficiency were identified at younger ages, had higher BMI SD scores, and had higher rates of hyperinsulinemia than patients with LEPR deficiency. Eleven patients benefitted from long-term metreleptin, with 1 losing efficacy due to neutralizing antibodies.

Deciphering the Clinical Presentations in LMNA-Related Lipodystrophy: Report of 115 Cases and a Systematic Review

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Context: Lipodystrophy syndromes are a heterogeneous group of rare genetic or acquired disorders characterized by generalized or partial loss of adipose tissue. LMNA-related lipodystrophy syndromes are classified based on the severity and distribution of adipose tissue loss.

Objective: We aimed to annotate all clinical and metabolic features of patients with lipodystrophy syndromes carrying pathogenic LMNA variants and assess potential genotype-phenotype relationships.

Methods: We retrospectively reviewed and analyzed all our cases (n = 115) and all published cases (n = 379) curated from 94 studies in the literature.

Results: The study included 494 patients. The most common variants in our study, R482Q and R482W, were associated with similar metabolic characteristics and complications though those with the R482W variant were younger (aged 33 [24] years vs 44 [25] years; P < .001), had an earlier diabetes diagnosis (aged 27 [18] vs 40 [17] years; P < .001) and had lower body mass index levels (24 [5] vs 25 [4]; P = .037). Dyslipidemia was the earliest biochemical evidence described in 83% of all patients at a median age of 26 (10) years, while diabetes was reported in 61% of cases. Among 39 patients with an episode of acute pancreatitis, the median age at acute pancreatitis diagnosis was 20 (17) years. Patients who were reported to have diabetes had 3.2 times, while those with hypertriglyceridemia had 12.0 times, the odds of having pancreatitis compared to those who did not.

Conclusion: This study reports the largest number of patients with LMNA-related lipodystrophy syndromes to date. Our report helps to quantify the prevalence of the known and rare complications associated with different phenotypes and serves as a comprehensive catalog of all known cases.

Do We Care Enough About the Presence of Sexual Problems in Diabetic Patients?

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Int J Gen Med. 2023 Nov 7:16:5147-5156. doi: 10.2147/IJGM.S441833. eCollection 2023 PMID: 37954658 PMCID: PMC10638931 DOI: 10.2147/IJGM.S441833

Purpose: Sexual health is not only the absence of sexual dysfunction or disability, but also the presence of physical, emotional, mental, and social well-being related to sexuality. The current study aims to determine whether all adult patients who have applied for their regular health check-ups due to diabetes mellitus had ever voluntarily expressed their sexual problems to a specialist and whether they were asked about the presence of sexual dysfunction. It also aims to determine how the physicians attach importance to the issue.

Patients and methods: All patients aged 18-65 years with type 1 and type 2 diabetes mellitus, who applied to our hospital between the years of January 2021 and 2022, were questioned by filling out a questionnaire for the presence of sexual problems in addition to screening for chronic complications of diabetes mellitus (retinopathy, nephropathy, and neuropathy) and routine history and physical examination.

Results: The association between the presence of sexual problems and whether patients were questioned about the relevant issue in their previous controls and gender and age factors, educational background, presence of comorbidities, duration of marriage, and microvascular complications of diabetes mellitus were examined. In a population of 595 patients, 53.78% of the patients stated that they had sexual problems; however, 9.91% had been questioned about this issue by the physician. It was observed that 6.3% of female and 15.3% of male patients had previously consulted a doctor voluntarily due to their sexual problems.

Conclusion: This study presents empirical findings that shed light on the inadequacies in healthcare providers' approach to addressing sexual health concerns among individuals diagnosed with diabetes, as well as the shortcomings in patients' effective communication of these concerns.

The Prevalence and Associated Risk Factors of Detectable Renal Morphological Abnormalities in Acromegaly

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Purpose: The aim of this study was to investigate the prevalence of simple renal cysts (SRCs) and kidney stone disease (KSD) together with laboratory data in patients with acromegaly through comparisons with healthy subjects, and to examine the possible risk factors associated with these abnormalities in acromegaly.

Methods: This retrospective, single-center study included 125 acromegaly patients (46.4 ± 11.6 years, 68 females/57 males) and 114 age-sex matched healthy individuals (45.3 ± 12.4 years, 59 females/55 males). Demographic data, clinical history, biochemical and abdominal/urinary system ultrasonographic data of the patients were reviewed.

Results: The SRC prevalence (28.8% vs. 8.8%, $p < 0.001$) and the longitudinal and transverse lengths of kidneys ($p < 0.05$) were significantly higher in patients with acromegaly compared to the control group. The presence of acromegaly was determined to increase the risk of SRC formation 12.8-fold. The prevalence of KSD was similar in both the patient and control groups (15.2% vs. 7.9%, $p = 0.08$). Patients with acromegaly with renal cysts ($n = 36$) compared to the group without cysts ($n = 89$) were older, had a higher male gender frequency, a longer pre-diagnosis symptom duration, and a higher incidence of hypertension and diabetes mellitus at the time of diagnosis. The multivariate logistic regression analysis showed that only advanced age and male gender were associated risk factors for SRCs in acromegaly patients.

Conclusion: The results of this study showed that acromegaly disease significantly increased the prevalence of SRCs and kidney length compared to the age-sex matched healthy population, while the prevalence of KSD was similar. Advanced age and male gender were seen to be independent risk factors for SRC formation in patients with acromegaly.

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

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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.

The Effects of Adequate Dietary Calcium Intake in Patients with Hypoparathyroidism Non-Adherent to Treatment: A Prospective Randomized Controlled Trial

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Objective: A significant problem that compels clinicians in the conventional treatment of hypoparathyroidism is patients' non-adherence to treatment. This study aimed to evaluate the effects of adequate Ca intake with dietary recommendations among hypoparathyroidism patients who persistently use Ca supplementation irregularly on plasma Ca and phosphate levels.

Methods: This prospective, randomized, controlled study was conducted on patients diagnosed with chronic hypoparathyroidism who persistently interrupt Ca supplementation therapy and therefore have a hypocalcemic course. Patients with a total daily Ca intake below 800 mg were randomized. All patients were advised to keep the doses of active vitamin D and Ca supplements they were currently using. The patients in the study group (n=32) were advised to consume 1,000-1,200 mg of Ca daily, and the patients in the control group (n=35) were advised to continue their diet according to their daily habits. After 12 weeks of follow-up, the patients' laboratory values were compared between groups to assess treatment goals.

Results: The mean of the total Ca level was 8.56±0.36 mg/dL in the study group and was found to be significantly higher than that in the control group, which was 7.67±0.48 mg/dL ($p<0.001$). The mean serum phosphate and serum Ca-P product levels were significantly higher in the study group ($p<0.001$) but did not exceed the safe upper limits in any patient.

Conclusion: A suitable increase in dietary Ca intake could effectively control hypocalcemia in patients with hypoparathyroidism who persistently interrupt the recommended calcium supplementation.

Evaluation of Lipoprotein(a) in the Prevention and Management of Atherosclerotic Cardiovascular Disease: A Survey Among the Lipid Clinics Network

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Background and aims: The European Atherosclerosis Society (EAS) Lipid Clinics Network promoted a survey in order to identify and understand how and when lipoprotein(a) [Lp(a)] is tested and clinically evaluated in lipid clinics throughout Europe, and the challenges that may prevent evaluation from being carried out.

Methods: This survey was divided into three areas of inquiry: background and clinical setting information of clinicians, questions for doctors who claimed not to measure Lp(a), in order to understand what were the reasons for not ordering the test, and questions for doctors who measure Lp(a), to investigate the use of this value in the management of patients.

Results: A total of 151 centres clinicians filled in the survey, out of 226 invited. The proportion of clinicians who declare to routinely measure Lp(a) in clinical practice was 75.5%. The most common reasons for not ordering the Lp(a) test were the lack of reimbursement or of treatment options, the non-availability of Lp(a) test, and the high cost of performing the laboratory test. The availability of therapies targeting this lipoprotein would result in a greater propensity of clinicians to start testing Lp(a). Among those who declared to routinely measure Lp(a), the Lp(a) measurement is mostly requested to further stratify patients' cardiovascular risk, and half of them recognized 50 mg/dL (approx. 110 nmol/L) as the threshold for increased cardiovascular risk due.

Conclusions: These results warrant for a great deal of effort from scientific societies to address the barriers that limit the routine use of the measurement of Lp(a) concentration and to recognise the importance of Lp(a) as a risk factor.

Metabolic Role of Hepassocin in Polycystic Ovary Syndrome

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Objective: Polycystic ovary syndrome (PCOS) is a female endocrinopathy characterized by hyperandrogenemia, insulin resistance, glucose intolerance, dyslipidemia, non-alcoholic fatty liver disease (NAFLD), and obesity. Hepassocin (HPS) is a hepatokine involved in energy and lipid metabolism. We aimed to investigate the role of HPS in metabolic dysfunction and its relationship with fatty liver in patients with PCOS.

Patients and methods: A total of 45 newly diagnosed PCOS patients and 42 healthy women of similar age were included in the study. Routine anthropometric, biochemical, and hormonal information were recorded. Serum HPS and high-sensitivity C-reactive protein (hsCRP) were measured, and NAFLD fibrosis score (NFS) and Fibrosis-4 (FIB-4) were calculated and correlated.

Results: HPS and hsCRP values of the PCOS group were found to be significantly higher than controls ($p=0.005$, $p<0.001$, respectively). A positive correlation was found between both HPS and hsCRP and luteinizing hormone (LH) ($p<0.001$). No correlation was observed between HPS and NFS and FIB-4, however, only a weak negative correlation was observed between hsCRP and FIB-4. A negative correlation was found between HPS and BMI, waist circumference, fat ratio, and HbA1c ($p<0.05$). In multivariate regression analysis for HPS, R-squared is 0.898, and hsCRP, neck circumference, fat amount, and LH are significant factors.

Conclusions: NAFLD is an important dysmetabolic component of PCOS. Serum HPS is elevated in PCOS patients. We found a positive correlation between hsCRP and LH and a negative correlation between obesity indices, although we did not find an association between NFS and FIB-4, and HPS. In the future, large-scale molecular studies of HPS may be beneficial.

Assessment of Forearm Muscles with Ultrasound Shear Wave Elastography in Patients with Acromegaly

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Purpose: The effects of acromegaly on soft tissues, bones and joints are well-documented, but information on its effects on muscle mass and quality remains limited. The primary goal of this study is to assess the sonoelastographic features of forearm muscles in patients with acromegaly.

Method: Forty-five patients with acromegaly and 45 healthy controls similar in terms of gender, age, and body mass index (BMI) were included in a single-center, multidisciplinary, cross-sectional study. The body composition was analyzed using bioelectrical impedance analysis (BIA), and height-adjusted appendicular skeletal muscle index (hSMI) was calculated. The dominant hand's grip strength was also measured. Two radiologists specialized in the musculoskeletal system employed ultrasound shear wave elastography (SWE) to assess the thickness and stiffness of brachioradialis and biceps brachii muscles.

Results: The acromegaly group had significantly higher thickness of both the biceps brachii ($p = 0.034$) and brachioradialis muscle ($p = 0.046$) than the control group. However, the stiffness of the biceps brachii ($p = 0.001$) and brachioradialis muscle ($p = 0.001$) was lower in the acromegaly group than in the control group. Disease activity has not caused a significant difference in muscle thickness and stiffness in the acromegaly group ($p > 0.05$). The acromegaly group had a higher hSMI ($p = 0.004$) than the control group. The hand grip strength was similar between the acromegaly and control group ($p = 0.594$).

Conclusion: The patients with acromegaly have an increased muscle thickness but decreased muscle stiffness in the forearm muscles responsible for elbow flexion. Acromegaly can lead to a permanent deterioration of the muscular structure regardless of the disease activity.

Novel Anti-obesity Therapies and their Different Effects and Safety Profiles: A Critical Overview

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Obesity has become an epidemic and a worldwide problem and its treatment is ever-evolving. Apart from diet and exercise, medication and surgery are other options. After disappointing side effects of various obesity drugs, new treatments showed promising results. This review discusses the following anti-obesity drugs: liraglutide, semaglutide, tirzepatide, orlistat, as well as the phentermine/topiramate and bupropion/naltrexone combinations. These drugs have been approved by the Food and Drug Administration (FDA) for weight reduction except for tirzepatide which is still under evaluation. Efficacy and tolerable safety profiles of some of these drugs contribute to the management of obesity and reduce the complications associated with this chronic disease.

Evaluation of Apolipoprotein A5 Variants: A Cohort of Patients with Severe Hypertriglyceridemia from Turkiye

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Background: This study aims to show the clinical and biochemical features in patients with severe hypertriglyceridemia (HTG) associated with rare variants in the apolipoprotein A-V (APOA5) gene.

Materials and methods: Demographics, blood lipid levels, body mass index (BMI) and APOA5 mutation subtypes were collected from the endocrinology clinic registry and analyzed for a retrospective cohort study of ten patients with severe HTG and APOA5 gene variants.

Results: Of the 10 cases, four were female, and six were male. The median age was 45.0 years (min-max: 21-60 years), the median triglyceride (TG) was 2429.5 mg/dL (27.5 mmol/L) (min-max: 1351-4087 mg/dL, 15.3-46.2 mmol/L), and the mean BMI was calculated as 30.4 ± 4.4 kg/m^2 (min-max: 24.9-41.0 kg/m^2). Four cases had diabetes mellitus (DM); two were on intensive insulin therapy, and two were on basal insulin therapy. The mean hemoglobin A1c (HbA1c) was 9.2 ± 1.2 % (min-max: 8.3-11.0 %). Among the study group, eight different APOA5 gene mutations were detected. These variants were heterozygous in 2 patients and homozygous (bi-allelic) in 8 patients. One patient was homozygous for APOA5 p.Ser19Trp, a relatively common polymorphism that is a risk variant for HTG.

Conclusion: We report a cohort of patients with biallelic and single copy APOA5 variants, who were diagnosed later in life. Most had secondary factors such as DM, or obesity with increased BMI. Most rare APOA5 variants found in our patients were of uncertain significance. Our results add to the growing evidence that rare variants in certain candidate genes may predispose to developing HTG, together with secondary factors such as obesity. The genetic basis of HTG in many other patients is still unknown and remains the subject of further investigation.

Impact of Bolus/Basal Insulin Ratio on HbA1c and Lipid Profile in Adult Patients with Type 1 Diabetes Mellitus

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Objective: To evaluate the existence of any relationship between the bolus/basal (B/b) insulin ratio and HbA1c and lipid profile in patients with Type 1 Diabetes mellitus (T1DM) on a basal-bolus treatment regimen.

Study design: Retrospective observational study. Place and Duration of the Study: University of Health Sciences, Diskapi Yildirim Beyazit Training and Research Hospital, Ankara, Turkey, from January 2015 to March 2020.

Methodology: This retrospective-observational study included 181 adult patients with T1DM. They were divided into two groups with <1.5 and ≥1.5 B/b insulin ratios, and the parameters were compared.

Results: The subjects comprised 94 females and 87 males with a mean age of 30.1 ± 9.2 years. Microvascular complications and dyslipidaemia were found in 30.9% and 68.5% of the patients, respectively. B/b insulin ratio of ≥1.5 was observed in 65.1% of the patients. The HbA1c level was <58 mmol/mol in 11.6% of the patients. A positive correlation was found between the B/b insulin ratio and HbA1c level. Fasting Plasma Glucose (FPG) and HbA1c levels were higher in those with ≥1.5 B/b insulin ratio. The rate of patients who reached the optimal HbA1c level was 3.57-fold lower in those with ≥1.5 B/b ratio.

Conclusion: A higher B/b insulin ratio was associated with higher HbA1c levels in patients with T1DM treated with intensive insulin therapy. Prospective studies are needed to define a causal relationship between the B/b insulin ratio, glycaemic parameters, and lipid profile.

Evaluation of Pituitary Function and Metabolic Parameters in Patients with Traumatic Maxillofacial Fractures

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Purpose: This study was designed to assess the pituitary functions of patients with traumatic maxillofacial fractures and compare the results with healthy controls.

Methods: Thirty patients (mean age, 38.14 ± 14.15 years; twenty-six male, four female) with a traumatic maxillofacial fracture at least 12 months ago (mean 27.5 ± 6.5 months) and thirty healthy controls (mean age, 42.77 ± 11.36 years; twenty-five male, five female) were included. None of the patients were unconscious following head trauma, and none required hospitalization in intensive care. Basal pituitary hormone levels of the patients were evaluated. All patients and controls had a glucagon stimulation test and an ACTH stimulation test to evaluate the hypothalamic-pituitary-adrenal axis and the GH-IGF-1 axis.

Results: Five of thirty patients (16.6%) had isolated growth hormone (GH) deficiency based on a glucagon stimulation test (GST). The mean peak GH level after GST in patients with hypopituitarism (0.54 ng/ml) was significantly lower than those without hypopituitarism (7.01 ng/ml) and healthy controls (11.70 ng/ml) ($P < 0.001$). No anterior pituitary hormone deficiency was found in the patients, except for GH.

Conclusion: Our study is the first to evaluate the presence of hypopituitarism in patients with traumatic maxillofacial fractures. Preliminary findings suggest that hypopituitarism and GH deficiency pose significant risks to these patients, particularly during the chronic phase of their trauma. However, these findings need to be validated in larger scale prospective studies with more patients.

The Effect of Radioiodine Therapy on Blood Cell Count in Patients with Differentiated Thyroid Cancer

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Purpose: This study aimed to investigate the long-term effects of radioiodine treatment (RAI) on blood cell counts in patients with differentiated thyroid cancer (DTC) and to describe the characteristics of patients at high risk for blood cell count abnormalities.

Methods: The study included patients with DTC who underwent RAI treatment between 2007 and 2017. Patients with regular complete blood counts for at least 5 years were included, while those with diseases or treatments that could influence blood count parameters were excluded. Blood cell count abnormalities were defined according to the Common Terminology Criteria for Adverse Events version 5.0, and factors influencing these abnormalities were examined.

Results: A total of 225 patients were analyzed. The mean age at diagnosis was 45.8 ± 13.9 years, and 76.5% of patients were female. In the first year after RAI, leukocyte, neutrophil, and lymphocyte counts were significantly reduced compared with baseline values. The leukocyte and neutrophil counts returned to baseline values by the third year, while the decrease in lymphocytes continued until the fifth year. Blood cell count abnormalities developed in 16 patients (7.1%) within the first year after RAI. Risk factors for blood cell count abnormalities within the first year after RAI included male sex, older age, T4, N1, and M1 disease, as well as higher RAI doses. In logistic regression analysis, only RAI dose remained independently associated with blood cell count abnormalities.

Conclusion: These results suggest an association between RAI dose and blood cell count abnormalities, characterized by mild lymphopenia, and indicate that the risk of mild lymphopenia persists over time. Careful consideration should be given when planning high-dose RAI for patients at a high risk of blood cell count abnormalities, such as males with metastatic disease and of advanced age.

Changing Presentation of Acromegaly in Half a Century: A Single-Center Experience

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Objective: Investigate the changes in the characteristics of presentation, in patients with acromegaly over a period of approximately half a century.

Methods: The medical records of patients diagnosed with acromegaly between 1980 and 2023 were retrospectively reviewed. The collected data were examined to assess any changes observed over the years and a comparison was made between the characteristics of patients diagnosed in the last decade and those diagnosed in previous years.

Results: A total of 570 patients were included in the study, 210 (37%) patients were diagnosed in the last decade. Patients diagnosed before 2014 had longer symptom duration before diagnosis, advanced age, larger pituitary adenomas, higher incidence of cavernous sinus invasion, and higher GH and IGF-1 levels than those diagnosed last decade ($p < 0.05$, for all). Furthermore, the patients diagnosed before 2014 had a lower rate of surgical remission ($p < 0.001$), and a higher prevalence of comorbidities such as diabetes, hypertension, colon polyps, and thyroid cancer at the time of diagnosis ($p < 0.05$, for all).

Conclusion: There may be a trend for earlier detection of patients with acromegaly.

Efficacy of Telemedicine Applications in Patients with Diabetic Foot Ulcers: A Focus on Mortality and Major Amputation Rates

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Int Wound J. 2023 Dec;20(10):3955-3962. doi: 10.1111/iwj.14283. Epub 2023 Jun 20. PMID: 37340728 PMCID: PMC10681535 DOI: 10.1111/iwj.14283

Amputations related to diabetic foot ulcers (DFU) are associated with high morbidity and mortality rates. Glycaemic control and close follow-up protocols are essential to prevent such ulcers. Coronavirus disease (COVID) related restrictions and regulations might have a negative impact on patients who are with DFU or candidates for DFU. We retrospectively analysed 126 cases that had DFU underwent amputation surgery. Comparative analyses were done between cases that were admitted before COVID restrictions (Group A) and cases admitted after COVID restrictions (Group B). Two groups were homogenic demographically. There was no significant difference between groups in terms of mortality (p = 0.239) and amputation rates (p = 0.461). The number of emergent cases in the pandemic period doubled the number in pre-pandemic period even though this finding was not statistically significant (p = 0.112). Fastly adapted consulting practice and follow-up protocols to compensate for the problems created by COVID-related regulations seem to be effective in terms of mortality and amputation rates.

Galanin-Like Peptide And its Correlation with Androgen Levels in Patients with Polycystic Ovary Syndrome

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Introduction: We aimed to investigate serum galanin-like peptide (GALP) levels and their correlation with hormonal and metabolic parameters in patients with polycystic ovary syndrome (PCOS).

Material and methods: The study included 48 women (age range, 18-44 years) with a diagnosis of PCOS, and a control group that included 40 healthy females (age range, 18-46 years). Waist circumference, body mass index (BMI), and Ferriman-Gallwey score were evaluated and plasma glucose, lipid profile, oestradiol, progesterone, total testosterone, prolactin, insulin, dehydroepiandrosterone sulphate (DHEA-S), follicle-stimulating hormone (FSH), luteinizing hormone (LH), thyroid-stimulating hormone (TSH), 25-hydroxyvitamin D (25(OH)D), fibrinogen, d-dimer, C-reactive protein (CRP), and GALP levels were measured in all study subjects.

Results: Waist circumference (p = 0.044) and Ferriman-Gallwey score (p = 0.002) were significantly higher in patients with PCOS compared to the control group. Among the metabolic and hormonal parameters studied, only total testosterone was significantly higher in patients with PCOS (p = 0.002). Also, the serum 25(OH)D level was significantly lower in the PCOS group (p = 0.001). CRP, fibrinogen, and D-dimer levels were all similar between the 2 groups. Serum GALP level was significantly higher in PCOS patients (p = 0.001). GALP was negatively correlated with 25(OH) D (r = -0.401, p = 0.002) and positively correlated with total testosterone values (r = 0.265, p = 0.024). Multiple regression analysis revealed that both total testosterone and 25(OH)D significantly contributed to GALP levels.

Conclusions: Our study is the first in the literature to evaluate serum GALP levels in patients with PCOS. Increased GALP levels in PCOS and its association with total testosterone levels might show that GALP can act as an intermediary in increased GnRH-mediated LH release, which is one of the underlying pathogenetic mechanism of PCOS.

Overall Assessment of Patients with Type 1 Gaucher Disease: A Single-Centre's Experience

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Purpose: To evaluate the demographic and clinical data of patients with type 1 Gaucher disease, a rare disease, at a single centre.

Methods: The data of patients with type 1 Gaucher disease who were followed up at the Endocrinology Department of Erciyes University's Medical Faculty Hospital between 2019 and 2021 were evaluated.

Results: We evaluated 13 patients with type 1 Gaucher disease who were diagnosed or followed up at our centre and whose data could be accessed. Four of the patients were male, and nine were female. The mean age at the time of diagnosis was 33 (± 11.32) years. Hepatomegaly was present in 11 of the 13 patients. Eight of the 13 patients had splenomegaly. Three patients had undergone splenectomy. The liver and spleen dimensions of two patients were normal. The platelet count was normal in three of the 10 patients without a history of undergoing splenectomy. Bone densitometry revealed that six patients had a lumbar z-score of ≤ − 2.5. Five patients had a score between − 1 and − 2.5, and two patients had a normal z-score. The mean treatment duration was 36 (± 19.46) months. All our patients were administered enzyme replacement therapy.

Conclusion: Gaucher disease is a rare lysosomal storage disease that affects many systems. It causes irreversible morbidity in patients in whom diagnosis is delayed. The main treatment modality was enzyme replacement therapy. Because it is a rare and multisystemic disease, patients should be followed up at centres with experience in treating Gaucher disease.

Case Report: Novel Pathogenic Variant Detected in Two Siblings with Type 1 Gaucher Disease

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Background: Gaucher disease (GD) is an autosomal recessive lysosomal storage disease. The disease develops due to glucocerebrosidase enzyme deficiency caused by biallelic pathogenic variants in the glucosylceramidase beta 1 (GBA1) gene, which encodes the glucocerebrosidase enzyme. The GBA1 gene is located at chromosomal location 1q22 and consists of 11 exons. In this article, we report a novel pathogenic variant in the GBA1 gene.

Case presentations: A 32-year-old female patient with no known chronic disease was admitted with complaints of weakness, bone pain, and abdominal pain. Her evaluation included hepatosplenomegaly, thrombocytopenia, osteoporosis, and anemia. The clinical suspicion of Gaucher disease was confirmed by glucocerebrosidase enzyme level and genetic testing. In her family screening, her sister also had hepato-splenomegaly, osteoporosis, thrombocytopenia, and anemia. Both sisters had no neurological symptoms. As a result of GBA1 gene sequence analysis in two of our patients, a missense variant was detected in the c.593C>A homozygous genotype. This variant has not been reported in any previously published case.

Conclusion: In this case report, we aimed to contribute to the literature by reporting a new novel pathogenic variant in the GBA1 gene leading to type 1 Gaucher disease that has not been described before.

Hypomagnesemia May Be Associated with Symptomatic Disease in Patients with Primary Hyperparathyroidism

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Aim: Magnesium (Mg) homeostasis is closely related to calcium (Ca) metabolism. Hypercalcemia inhibits the reabsorption of Mg from the kidneys, leading to hypomagnesemia. Therefore, patients with primary hyperparathyroidism (PHPT) are predisposed to hypomagnesemia. However, there are few studies on the clinical significance of hypomagnesemia in PHPT. The aim of this study was to retrospectively evaluate the association of hypomagnesemia with the clinical outcomes of PHPT.

Materials and methods: A retrospective evaluation was made of the data of 538 consecutive patients (478 females, 60 males) diagnosed with PHPT in our center.

Results: The mean age of the study population was 56.5 ± 11.66 years. The mean serum Mg level was 2 ± 0.26 mg/dl. Asymptomatic disease was present in 241 (44%) patients. Symptomatic patients with osteoporosis, Ca level ≥11.2 mg/dl, and estimated glomerular filtration rate (eGFR) < 60 mL/min/1.73 m^2 had lower levels of Mg ($p < 0.05$). Hypomagnesemia was detected in 129 of 538 patients (23.9%). The patients with hypomagnesemia had a higher rate of symptomatic disease (80% vs. 48%, $p < 0.0001$). The serum parathormone (PTH) level was found to be higher in patients with hypomagnesemia and the lumbar and femur T-scores and serum vitamin D levels were lower ($p < 0.05$). Patients with hypomagnesemia had higher rates of kidney stones (34% vs. 21%, $p = 0.003$) and osteoporosis (74% vs. 32%, $p < 0.001$). Multivariate logistic regression analysis revealed that hypomagnesemia had a significant effect on the development of symptomatic disease (OR:6.88, CI 95%: 5.20-11.27, $p < 0.001$).

Conclusions: The current study results demonstrate that hypomagnesemia may be associated with a higher risk of osteoporosis and kidney stones in PHPT patients. Routine evaluation of serum Mg may predict the clinical outcomes of PHPT.

Angiotensin-Converting Enzyme (ACE) Level, But Not ACE Gene Polymorphism, is Associated with Prognosis of COVID-19 Infection: Implications for Diabetes and Hypertension

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Background: The renin-angiotensin-aldosterone system was shown to be activated in severe COVID-19 infection. We aimed to investigate the relationship between angiotensin converting enzyme (ACE) levels, ACE gene polymorphism, type 2 diabetes (T2DM), and hypertension (HT) and the prognosis of COVID-19 infection.

Methods: This cross-sectional study analyzed the clinical features of adult patients with SARS-CoV-2 infection. ACE gene analysis and ACE level measurements were performed. The patients were grouped according to ACE gene polymorphism (DD, ID or II), disease severity (mild, moderate, or severe), and the use of dipeptidyl peptidase-4 enzyme inhibitor (DPP4i), ACE-inhibitor (ACEi) or angiotensin receptor blocker (ARB). Intensive care unit (ICU) admissions and mortality were also recorded.

Results: A total of 266 patients were enrolled. Gene analysis detected DD polymorphism in the ACE 1 gene in 32.7% (n = 87), ID in 51.5% (n = 137), and II in 15.8% (n = 42) of the patients. ACE gene polymorphisms were not associated with disease severity, ICU admission, or mortality. ACE levels were higher in patients who died ($p = 0.004$) or were admitted to the ICU ($p<0.001$) and in those with severe disease compared to cases with mild ($p = 0.023$) or moderate ($p<0.001$) disease. HT, T2DM, and ACEi/ARB or DPP4i use were not associated

with mortality or ICU admission. ACE levels were similar in patients with or without HT (p = 0.374) and with HT using or not using ACEi/ARB (p = 0.999). They were also similar in patients with and without T2DM (p = 0.062) and in those with and without DPP4i treatment (p = 0.427). ACE level was a weak predictor of mortality but an important predictor of ICU admission. It predicted ICU admission in total (cutoff value >37.092 ng/mL, AUC: 0.775, p<0.001).

Conclusion: Our findings suggest that higher ACE levels, but not ACE gene polymorphism, ACEi/ARB or DPP4i use, were associated with the prognosis of COVID-19 infection. The presence of HT and T2DM and ACEi/ARB or DPP4i use were not associated with mortality or ICU admission.

Comparison of Staging and Recurrence Predictors in Patients with Differentiated Thyroid Cancer Between the 7th and 8th Editions of the American Joint Committee on Cancer Staging Systems

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Background: The predictive value of American Joint Committee on Cancer (AJCC) 8 for recurrence in differentiated thyroid cancer (DTC) is not known. We aimed to compare AJCC 7 and 8 regarding the differences in staging and recurrence predictors in DTC.

Methods: Demographic, clinical (duration of disease and follow-up, the extent of surgery), laboratory (TSH, fT4, thyroglobulin, and antithyroglobulin), pathological (type of thyroid cancer, localization, multifocality, diameter, extrathyroidal extension [ETE], and lymph node [LN] metastasis), and imaging findings (sonography, and whole-body scan), and follow-up features (metastases, recurrence and/or persistence, and RAI need) were retrospectively analyzed in adult patients with DTC followed-up for at least six months. Staging was determined in accordance with AJCC 7 and AJCC 8, prediction of recurrence and persistence by ATA risk stratification, and death risk by AMES systems. The alterations in staging and recurrence predictors were analyzed.

Results: A majority of study patients (N.=524) were female (N.=424) and diagnosed with papillary cancer (N.=511), the median age at diagnosis was 44. 97.89% (N.=93) of stage 2-4 patients (N.=95) in AJCC 7 were down-staged in AJCC 8. We down-staged 41 patients of 45-55 years of age into stage 1 in AJCC 8 independent of LN status. A percentage of 26.71% of patients (N.=140) did have persistence, 9.54% (N.=50) persistence at the last follow-up, and 9.54% (N.=50) had recurrence. According to AJCC 8, T4 and AMES high risk were predictors for recurrence (hazard ratio: 3.053, P=0.023; hazard ratio:2.465, and P=0.005; respectively). Both AJCC 7 and 8 were associated with recurrence (P=0.008 and P<0.001, respectively). Stage 4 in AJCC 7, and stages 3 and 4 in AJCC 8 better predicted the probability of recurrence.

Conclusions: Our findings suggest that AJCC 8 better predicted the recurrence in DTC than AJCC 7. In AJCC 8, T4 tumor, AMES high risk, stages 3 and 4 predicted recurrence. The vast majority of patients with stages 2-4 in AJCC 7 were down-staged in AJCC 8.

Does Total Tumour Diameter, Multifocality, Number of Tumour Foci, or Laterality Predict Lymph Node Metastasis or Recurrence in Differentiated Thyroid Cancer?

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Introduction: Data regarding laterality, focality, or total tumour diameter (TTD) in papillary thyroid cancer (PTC) are limited. We aimed to investigate the impact of focality, TTD, number of tumour foci, or laterality on aggressive features in PTC.

Material and methods: Patients were categorized based on maximum tumour diameter (MTD) (≤ 10 vs. > 10 mm), focality, laterality, or the number of tumour foci (1/2/≥ 3). We also categorized the patients as follows: Group 1, unifocal microcarcinoma (MTD ≤ 10/TTD ≤ 10 mm); Group 2, multifocal microcarcinoma (MTD ≤ 10/TTD ≤ 10 mm); Group 3, multifocal microcarcinoma (MTD ≤ 10/TTD > 10 mm); Group 4, unifocal macrocarcinoma (MTD > 10/TTD > 10 mm); Group 5, multifocal macrocarcinoma (MTD > 10/TTD > 10 mm).

Results: The mean diagnosis age (n = 511) was 44.7 (± 12.7) years, the majority of the patients were < 55 years old (n = 310) and female (n = 416). An increasing number of tumour foci were associated with a higher MTD or TTD, a higher ratio of extrathyroidal extension (ETE), vascular or lymphatic invasion, lymph node metastasis (LNM) or distant metastasis, or the need for radioactive iodine (RAI). There was no difference in the parameters between Group 3 and Group 2, or Group 4. Vascular invasion, American Thyroid Association high risk, LNM at diagnosis, and RAI total dose were higher in Group 5 than in Group 3. Microscopic or macroscopic ETE, T1b, and T4a were positive predictors for recurrence. Male sex, multifocality, number of tumour foci (≥ 3), MTD (> 10 mm), TTD (> 10 mm), Group 5, microscopic or macroscopic ETE, lymphatic or vascular invasion, RAI need, T2, and T4b were positive predictors for LNM.

Conclusion: MTD and TTD increase the risk of LNM but not the recurrence in PTC. TTD, multifocality, and bilaterality can be considered risk factors in PTC staging systems and risk calculators.

Effect of Cross-Sex Hormone Therapy on Hematological Parameters in Transmen: A 1-Year Follow-Up Study

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https://endocrinolrespract.org/tr/effect-of-cross-sex-hormone-therapy-on-hematological-parameters-in-transmen-a-1-year-follow-up-study-161911

Objective: Testosterone is the primary cross-sex hormone therapy (CSHT) for the female-to-male (transmen) transition. However, there is a growing concern about the safety and long-term results of CSHT, including erythrocytosis and inflammation. We aimed to investigate the effects of testosterone therapy on hematological parameters and high-sensitive C-reactive protein (hsCRP) in transmen with a 1-year follow-up.

Methods: This was a single-center prospective study in 45 hormone-naive transmen and 28 ageand body mass index (BMI)-matched ciswomen. Ciswomen were compared with hormone-naive transmen. Testosterone ester preparation (250 mg) was prescribed to all transmen every 21 days. The transmen were evaluated before treatment and 6 and 12 months following CSHT. Sex steroids, complete blood counts, and hsCRP were analyzed.

Results: At initial assessment before CSHT, the transmen had higher total testosterone (P=.002), white blood cell count (P=.013), and neutrophil count (P=.015) than the ciswomen. The exogenous testosterone administration to transmen was associated with a significant increase in hematocrit (P < .001) and hsCRP (P=.002) at 12 months.

Conclusion: Testosterone administration to transmen was associated with a significant increase in hematocrit and hsCRP at 12 months. These parameters should be regularly monitored in line with current guidelines.

Hyperandrogenism-Related Metabolic Changes in Drug-Naïve Transmen Compared to Cisgender Women: A Case-Controlled Study

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Introduction: The aetiology of gender dysphoria is still unclear. Although prior studies have shown that trans men have higher androgen levels than cisgender women, they all concluded unselected populations. Our reason for performing this study is to evaluate trans men's hormone profile and metabolic status to compare with cisgender women in a more selected population. This is the first case-controlled study to compare anthropometric, metabolic, and endocrinological parameters of drug-naïve trans men with those of cisgender women.

Material and methods: We designed this study as a single-centre observational cohort study. We included 70 drug naïve trans men, and the control group comprised 34 healthy cisgender women. We measured and compared hormone profiles and metabolic parameters in the 2 groups.

Results: Of the 70 trans men individuals, 16 (22.85%) met the Rotterdam criteria and were diagnosed with polycystic ovary syndrome (PCOS); 4 individuals in the control group met the criteria (11.7%). Although we matched body mass index in the groups, total testosterone, free androgen index, androstenedione, 17 hydroxyprogesterone, muscle strength, triglyceride, and homeostatic model assessment of insulin resistance levels were significantly higher in the trans men than in the cisgender women (p < 0.05). Even after were excluded PCOS patients, hyperandrogenaemia was apparent in the trans men.

Conclusion: Our study showed that trans men have clearly higher androgen levels, which may have been the reason for metabolic changes compared to cisgender women. However, the main reason for hyperandrogenism in drug-naïve trans men is still not known, and more comprehensive studies are needed.

Investigation of The Effect of Weight Loss After Laparoscopic Sleeve Gastrectomy on Cobb Angle, Waist and Back Pain: A Prospective Study

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Surg Obes Relat Dis.2023 Dec;19(12):1357-1365. doi: 10.1016/j.soard.2023.07.010. Epub 2023 Aug 4. PMID: 37673710 DOI: 10.1016/j.soard.2023.07.010

Background: In many studies, it has been stated that obesity causes severe increases in the risks of disc degeneration, vertebral fracture, low back, and back pain. One of the most effective treatment options for obesity is bariatric surgery.

Objectives: In this study, the effect of weight loss on these parameters was investigated by evaluating the Cobb angle, low back, and back pain.

Setting: University Hospital METHODS: A total of 89 patients were included in the study. Laparoscopic sleeve gastrectomy (SG) was performed on all patients. In addition, Cobb angle, height, weight, and body mass index (BMI) measurements were recorded at each visit. Investigating the quality and quantity of low back pain and the loss of function caused by the patients; visual analog scale (VAS), Oswestry Low Back Pain Disability Questionnaire (OLBPDQ), Roland-Morris Disability Questionnaire (RMDQ), and SF-36 Quality of Life Questionnaire (SF36) were administered.

Results: According to the preoperative Cobb angles, the decrease in the 6th month (P = .029) and 12th month (P = .007) measurements after the operation was found to be statistically significant (P < .05), but it was found to be clinically insignificant. When the changes in RMDQ, OLBPDQ, VAS, and SF-36 scores were examined, the decrease in the 6th month (P = .001) and 12th month (P = .001) scores after the operation was found to be significant compared to the preoperative scores (P < .01).

Conclusions: In this study, weight loss after SG improved for patients with chronic low back and back pain and significantly improved their quality of life.

Successful Localisation of Recurrent Thyroid Cancer Using Preoperative Patent Blue Dye Injection

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Purpose: In the follow-up of patients with thyroid cancer, recurrences are often detected, posing challenges in locating and removing these lesions in a reoperative setting. This study aimed to assess the effectiveness of preoperative ultrasound (US)-guided injection of patent blue (PB) dye into the recurrences to aid in their safe and efficient removal.

Methods: In this retrospective analysis, we reviewed the records of the patients in a tertiary care centre between February 2019 and March 2023 who underwent US-guided PB injection in the endocrinology outpatient clinic before reoperative neck surgery. The duration between the injection of PB and the initiation of surgery was recorded. The complications and effectiveness of the procedure were evaluated using ultrasonographic, laboratory, surgical, and pathologic records.

Results: We reached 23 consecutive patients with 28 lesions. The recurrences averaged 8.8 mm (4.1-15.6) in size and were successfully stained in all cases. The median time between the PB injection and the incision was 90 (35-210) min. There were no complications related to the dye injection. The blue recurrences were conveniently identified and removed in all cases.

Conclusions: A preoperative US-guided injection of PB is a safe, readily available and highly effective technique for localising recurrent tumours, even in small lesions within scarred reoperative neck surgeries.

Low Vitamin D Levels Predict Outcomes of COVID-19 in Patients with Both Severe and Non-Severe Disease at Hospitalization

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Purpose: Low vitamin D in COVID-19 have been related to worse outcomes. However, most of the studies conducted so far were not-controlled and retrospective, including biases potentially influencing this association. We evaluated 25(OH) vitamin D levels of patients with both severe and non-severe disease at hospital-admission, and in a cohort of control subjects. Moreover, we evaluated sACE-2 levels to investigate the mechanisms underlying the association between vitamin D and COVID-19.

Methods: COVID-19 patients were enrolled in a matched for age, sex and comorbidities 1:1-ratio based on the presence/or not of respiratory-distress/severe-disease at hospital-admission. Control matched subjects were enrolled from an outpatient-setting.

Results: Seventy-three COVID-19 patients (36 severe and 37 non-severe) and 30 control subjects were included. We observed a higher vitamin D deficiency (<20 ng/mL) prevalence in COVID-19 patients than control subjects (75% vs 43%). No differences were found regarding 25(OH) vitamin D and sACE-2 levels between patients with and without severe-disease at study entry. During the disease-course, in the severe group a life-threatening disease occurred in 17 patients (47.2%), and, in the non-severe group, a worsening disease occurred in 10 (27%). 25(OH)vitamin D levels, at admission, were negatively correlated with sACE-2 levels, and were lower in patients whose disease worsened as compared to those in whom it did not, independently from the disease severity at admission. In multivariate-analysis, lower 25(OH)vitamin D resulted as an independent risk factor for disease worsening.

Conclusions: 25(OH)vitamin D levels at hospital-admission strongly predicted the occurrence of worsening outcomes in COVID-19 independently of the disease severity at presentation.

Morning Exercise Affects The Absorption of Oral Levothyroxine: A Single Center Pilot Study

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Purpose: Levothyroxine (LT4) is the first-line hormone replacement therapy for hypothyroidism. Several factors which have an influence on oral LT4 absorption have been previously described; however, the influence of exercise on oral LT4 absorption has not been reported, yet. It was aimed to investigate the possible effect of morning exercise, right after LT4 ingestion, on the absorption of LT4 tablets in this study.

Patients and methods: Patients with primary hypothyroidism who fulfilled the inclusion criteria were offered to participate in a 6-week morning exercise programme and those who agreed to participate were enrolled in our study. Patients were required to have a walk for 30 min with a regular speed right after taking their daily LT4 treatments and start having breakfast the first hour after LT4 intake. Pre- and post-exercise TSH levels were recorded and TSH percentage change was calculated.

Results: All patients had decreased TSH levels after the exercise programme. There was a significant decrease in TSH levels ($p < 0.001$). A significant positive correlation between TSH percentage change and daily dose of LT4 per kg of body weight was also shown.

Conclusions: This is the first study which demonstrates the significant positive effect of morning exercise on the absorption of LT4 tablets. In addition to that, it was also found that as the daily dose of LT4 increases, the percentage decrease of TSH level becomes greater.

The Association of Bone Mineral Density Z-Score with The Early Postoperative Remission and Characteristics of Bone Mineral Loss in Patients with Cushing's Disease: A Retrospective Study

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Aim: To investigate the association of bone mineral density (BMD) Z-scores with early-postoperative remission rate and clinical parameters in patients with Cushing's disease (CD).

Methods: We retrospectively evaluated the records of patients diagnosed with CD. After the exclusion of 230 patients, 87 CD patients were finally enrolled. BMD was determined by dual-energy x-ray absorptiometry (DXA) at the lumbar spine 1-4 (L1-4) and left femur. Early-postoperative remission was defined as a morning cortisol concentration on the first day after surgery of less than 5 μg/dL. The diagnosis of BMD "below the expected range for age" was defined as a Z-score$\leq$-2.00 standard deviations.

Results: DXA results were not significantly associated with early postoperative remission. They also did not significantly differ between eugonadal and menopausal groups. Preoperative morning cortisol significantly negatively but weakly correlated with Z-score of the total femur, while preoperative adrenocorticotropic hormone/cortisol ratio positively but weakly correlated with DXA results of L1-4.

Conclusion: The severity of bone loss was not significantly related to the failure of transsphenoidal surgery for Cushing's disease.

N-Nitrosomorpholine-Induced Oncocytic Transformation in Rat Endocrine Organs

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Background: N-Nitrosomorpholine (NMO) is one of the most common N-nitroso compounds. An oncocytic transformation has been demonstrated in renal tubules of NMO-treated rats. In our study, we aimed to investigate the potential transformation of oncocytic cells in 6 endocrine organs, i.e., thyroid, adrenal and pituitary glands, pancreas, testis, and bone, of NMO-exposed rats.

Methods: Thirty male rats were born and raised. Fifteen of them were given a single dose of 320 mg NMO per kg body weight, dissolved in drinking water, by a gavage tube. At the end of 52 weeks, the animals in both series were killed. Right after the killing, 6 different endocrine organs (hypophysis, thyroid, pancreas, adrenal gland, bone [femur], and testicles) of each animal were excised.

Results: There was no evidence of oncocytic cell development in the control group. In contrast, oncocytes were observed in 8 out of 13 NMO-treated rats: 2 in the adrenal sections, 1 in the thyroid sections, 3 in the pituitary sections, and 2 in the pancreas sections. Thesticle and bone sections were completely normal.

Conclusions: We showed that NMO induced an oncocytic change in pancreas, thyroid, pituitary, and adrenal glands. To date, no identified specific environmental risk factors that lead to an oncocytic transformation in endocrine glands have been reported previously. Given the increasing prevalence of endocrine-disrupting chemicals in the environment, personal care products, manufactured goods, and food sources, there is a need to advance our understanding of the pathological mechanisms underlying oncocytosis in endocrine organs.

Pilot Study to Define Criteria for Pituitary Tumors Centers of Excellence (PTCOE): Results of an Audit of Leading International Centers

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Purpose: The Pituitary Society established the concept and mostly qualitative parameters for defining uniform criteria for Pituitary Tumor Centers of Excellence (PTCOEs) based on expert consensus. Aim of the study was to validate those previously proposed criteria through collection and evaluation of self-reported activity of several internationally-recognized tertiary pituitary centers, thereby transforming the qualitative 2017 definition into a validated quantitative one, which could serve as the basis for future objective PTCOE accreditation.

Methods: An ad hoc prepared database was distributed to nine Pituitary Centers chosen by the Project Scientific Committee and comprising Centers of worldwide repute, which agreed to provide activity information derived from registries related to the years 2018-2020 and completing the database within 60 days. The database, provided by each center and composed of Excel® spreadsheets with requested specific information on leading and supporting teams, was reviewed by two blinded referees and all 9 candidate centers satisfied the overall PTCOE definition, according to referees' evaluations. To obtain objective numerical criteria, median values for each activity/parameter were considered as the preferred PTCOE definition target, whereas the low limit of the range was selected as the acceptable target for each respective parameter.

Results: Three dedicated pituitary neurosurgeons are preferred, whereas one dedicated surgeon is acceptable. Moreover, 100 surgical procedures per center per year are preferred, while the results indicated that 50 surgeries per year are acceptable. Acute post-surgery complications, including mortality and readmission rates, should preferably

be negligible or nonexistent, but acceptable criterion is a rate lower than 10% of patients with complications requiring readmission within 30 days after surgery. Four endocrinologists devoted to pituitary diseases are requested in a PTCOE and the total population of patients followed in a PTCOE should not be less than 850. It appears acceptable that at least one dedicated/expert in pituitary diseases is present in neuroradiology, pathology, and ophthalmology groups, whereas at least two expert radiation oncologists are needed.

Conclusion: This is, to our knowledge, the first study to survey and evaluate the activity of a relevant number of high-volume centers in the pituitary field. This effort, internally validated by ad hoc reviewers, allowed for transformation of previously formulated theoretical criteria for the definition of a PTCOE to precise numerical definitions based on real-life evidence. The application of a derived synopsis of criteria could be used by independent bodies for accreditation of pituitary centers as PTCOEs.

Modern Approach to Resistant Acromegaly

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Background: Targets of acromegaly treatment are normalization of biochemical values, removal/reduction/stabilization of the pituitary mass, control of clinical activity and mortality with a multimodal/multidisciplinary approach. Despite significant technological and pharmacological progress, still several patients with acromegaly bear a resistant somatotroph adenoma and active disease may persist for many years with resultant poor clinical outcomes.

Aim: To review briefly definition and pathophysiology of resistance to acromegaly treatment and the options of medical treatment in this context, exploring the role of novel clinical and molecular biomarkers in the personalization of therapy and proposing updates to the currently available guidelines for the treatment of resistant GH-secreting adenomas.

Conclusions: In the last few years, in parallel with the increased number of medical options available for the therapy of acromegaly, relevant advances occurred in the understanding of the role of novel molecular and clinical biomarkers in predicting the responsiveness to second-line medical treatments, such as Pegvisomant and Pasireotide LAR, and helping clinicians in the personalization of the follow-up and treatment of resistant somatotroph adenomas. The integration of these findings into the existing guidelines may represent a possibly important step forward in the management of "difficult" acromegaly patients.

Vitamin D and Malabsorptive Gastrointestinal Conditions: A Bidirectional Relationship?

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This paper is one of the outcomes of the 5th International Conference "Controversies in Vitamin D" held in Stresa, Italy from 15 to 18 September 2021 as part of a series of annual meetings which was started in 2017. The scope of these meetings is to discuss controversial issues about vitamin D. Publication of the outcomes of the meeting in international journals allows a wide sharing of the most recent data with the medical and academic community. Vitamin D and malabsorptive gastrointestinal conditions was one of the topics discussed at the meeting and focus of this paper. Participants to the meeting were invited to review available literature on selected issues related to vitamin D and gastrointestinal system and to present their topic to all participants with the aim to initiate a discussion on the main outcomes of which are reported in this document. The presentations were focused on the possible bidirectional relationship between vitamin D and gastrointestinal malabsorptive conditions such as celiac disease, inflammatory bowel diseases (IBDs) and bariatric surgery. In fact, on one hand the impact of these conditions on vitamin D status was examined and on the other hand the possible role of hypovitaminosis D on pathophysiology and clinical course of these conditions was also evaluated. All examined malabsorptive conditions severely impair vitamin D status. Since vitamin D has known positive effects on bone this in turn may contribute to negative skeletal outcomes including reduced bone mineral density, and increased risk of fracture which may be mitigated by vitamin D supplementation. Due to the immune and metabolic extra-skeletal effects there is the possibility that low levels of vitamin D may negatively impact on the underlying gastrointestinal conditions worsening its clinical course or counteracting the effect of treatment. Therefore, vitamin D status assessment and supplementation should be routinely considered in all patients affected by these conditions. This concept is strengthened by the existence of a possible bidirectional relationship through which poor vitamin D status may negatively impact on clinical course of underlying disease. Sufficient elements are available to estimate the desired threshold vitamin D level above which a favourable impact on the skeleton in these conditions may be obtained. On the other hand, ad hoc controlled clinical trials are needed to better define this threshold for obtaining a positive effect of vitamin D supplementation on occurrence and clinical course of malabsorptive gastrointestinal diseases.

High Thyroperoxidase Antibody Titers May Predict Response to Antithyroid Drug Treatment in Graves Disease: A Preliminary Study

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Background and aim: Antithyroid drugs are first treatment for Graves hyperthyroidism worldwide. Although remission can be achieved in approximately 40-50% of patients in 12-18 months with antithyroid drugs, this period can be extended up to 24 months. We aimed to evaluate the effect of individual clinical/biochemical variables and GREAT score in predicting response to antithyroid drug in Graves disease.

Material and methods: This is a retrospective single-center study including 99 patients with the first episode of Graves disease treated for at least 18 months. The patients were classified into two groups as those who responded to antithyroid medication at 18-24 months (group 1) and those who did not respond at 24 months and continued with low-dose antithyroid medication (group 2).

Results: Medical treatment response was obtained in 38 (38.3%) of the patients at 18 months, and in 19 (19.1%) patients at 24 months. Long-term medical treatment (>24 months) was given to the remaining 43 patients due to the lack of response to medical treatment. Thyroid volume and free T4 levels were higher in those followed up with long-term antithyroid drugs, and orbitopathy was more common in this group. Median anti TPO value was significantly higher in group 1 when compared to group 2 (593 U/l and 191.6 U/l respectively). More patients were classified as GREAT class 3 in group 2 when compared to group 1 (46.5% and 12,5% respectively). We analyzed the Thyroperoxidase Antibody(anti TPO) titers, which we divided into three levels, according to groups 1 and 2. Post-hoc Chi-Square analysis revealed that falling into the highest anti TPO category was significantly associated with response to medical therapy in 24 months ($p < 0.05$).

Conclusion: According to our study, GREAT score and anti TPO Ab titers at presentation may help predict response to ATD in Graves disease.

Evaluation of The Effects of Empagliflozin on Acute Lung Injury in Rat Intestinal Ischemia-Reperfusion Model

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Background: Empagliflozin is a selective sodium-glucose co-transporter (SGLT2) inhibitor that is approved for the treatment of type 2 diabetes. The beneficial effects of empagliflozin on other organ systems including the heart and kidneys have been proven. The aim of this study is to evaluate the role of empagliflozin on acute lung injury induced by intestinal ischemia-reperfusion (I/R).

Materials and methods: A total of 27 male Wistar albino rats were divided into three groups: sham, I/R, and I/R + empagliflozin; each group containing nine animals. Sham group rats underwent laparotomy without I/R injury. Rats in the I/R group underwent laparotomy, 1 h of after ischemia-reperfusion injury (superior mesenteric artery ligation was followed by 2 h of reperfusion). Rats in I/R were given empagliflozin (30 mg/kg) by gastric gavage for 7 days before the ischemia-reperfusion injury. All animals were killed at the end of reperfusion and lung tissue samples were obtained for immunohistochemical staining and histopathological investigation in all groups.

Results: Serum glucose, AST, ALT, creatinine, native thiol, total thiol, and disulfide levels and disulfide-native thiol, disulfide-total thiol, and native thiol-total thiol ratios as well as the IMA levels were analyzed and compared among the groups. While intestinal I/R significantly increases serum aspartate aminotransferase (AST), alanine aminotransferase (ALT), and creatinine levels; did not cause any change in homeostasis parameters and IMA level. Empagliflozin treatment had no significant effect on biochemical parameters. Empagliflozin treatment induced a significant decrease in positive immunostaining for IL-1, IL-6, TNF-alpha, caspase 3, caspase 8, and caspase 9 compared to the I/R group in lung tissue samples. Intestinal I/R caused severe histopathological injury including edema, hemorrhage, increased thickness of the alveolar wall, and infiltration of inflammatory cells into alveolar spaces. Empagliflozin treatment significantly attenuated the severity of intestinal I/R injury.

Conclusions: It was concluded that empagliflozin treatment may have beneficial effects in acute lung injury, and, therefore, has the potential for clinical use.

Burden of Diabetic Foot Patients' Caregivers and Affecting Factors: A Cross-Sectional Study

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With the increase in the diabetic foot patients in recent decades, the caregivers of diabetic foot patients increase too. Most of these caregivers are informal caregivers. However, the studies examining the burden of the caregivers and affecting factors are limited. This study was conducted to determine the burden of the caregivers of diabetic foot patients and affecting factors. This cross-sectional study was conducted between the January and October 2020 in a diabetic foot council of a university hospital. Zarit Caregiver Burden Scale and a participant identification form were used for data collection. Most of the caregivers were female (75.2%) and the mean age was 51.27 ± 11.48 years. The burden of the caregivers was at moderate level in the current study. Factors affecting the caregivers' burden were caregivers' age, patients' family structure, caregivers' education level, caregivers' income level, hours per week spending for the care of the patients, and lack of choice.

Sonographic Features of Atypical and Initially Missed Parathyroid Adenomas: Lessons Learned From a Single-Center Cohort

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Context: Awareness of typical and atypical ultrasonographic (US) features of parathyroid adenomas (PAs) is crucial since US is the most widely used first-line imaging modality.

Objective: The purpose of this study was to describe the atypical features of PAs on US and other possible factors leading to a false negative examination in a large single-center cohort.

Materials and methods: The US records of 457 PAs in 445 patients with biochemically proven primary hyperparathyroidism (PHPT) were evaluated in a prospectively maintained database. Atypical size, composition, shape, echogenicity, location, and vascular pattern on US were noted. For patients who previously had at least one negative US examination in referring centers, the main possible reason was defined accordingly.

Results: The study group included 359 female and 86 male patients with PHPT. Typical sonographic features were observed in 231 PAs (51%), whereas 226 (49%) had at least one atypical US feature. The most common atypical features were atypical size (29%), followed by atypical echogenicity (19%), shape (8%), location (7%), and composition (7%), respectively. There were 122 initially missed PAs in all groups. The most frequent main atypical US features leading to false negative examinations were atypical size (22.1%) and atypical location (18.8%). Inexperience was third most common reason (16.3%) for false negative US examinations.

Conclusions: Almost half of PAs have at least one atypical feature on US. Awareness of the high prevalence of atypical US features could increase the accuracy of US examination and potentially decrease demand for more expensive second-line imaging modalities.

Cerebral Perfusion in Type 2 Diabetes Mellitus: A Preliminary Study with MR Perfusion

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Background: Type 2 diabetes mellitus (T2DM) is associated with altered cerebral vasoreactivity, cognitive impairment, and functional decline. Magnetic Resonance (MR) perfusion can be used to assess cerebral blood flow (CBF). The aim of this study is to analyze the association between diabetes mellitus and cerebral perfusion.

Methods: The study included 52 patients diagnosed with T2DM and 39 healthy individuals. The diabetic patients were classified into three groups (PRP: proliferative retinopathy, NPRP: non-proliferative retinopathy, Non-RP: non-retinopathy DM). The rCBF measurements of cortical gray matter and thalami were carried out using the region of interest. Reference quantitative measurements were performed from ipsilateral white matter.

Results: The comparison between the T2DM group and the control group revealed that rCBF values of bilateral frontal lobes, cingulate gyrus, medial temporal lobe, thalami and right occipital lobe were measured to be significantly lower in the T2DM group ($p < 0.05$). No significant difference was detected between the two groups in terms of rCBF values of the left occipital lobe and anterior aspect of the left temporal lobe ($p > 0.05$). The rCBF values were lower in the anterior aspect of the right temporal lobe and the difference showed borderline statistical significance ($p = 0.058$). No significant difference was detected regarding mean rCBF values measured in the regions of cerebral hemispheres among the three patient groups with T2DM ($p>0.05$).

Conclusion: Regional hypoperfusion was encountered in most of the lobes in the T2DM group when compared with the healthy group. However, in terms of rCBF values, there was no significant difference among the three groups with T2DM.

Is There A Connection Between Primary Hypophysitis and Celiac Disease?

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Aim: To investigate the autoimmune and genetic relationship between primary hypophysitis (PH) and celiac disease (CD).

Methods: The study was retrospective and patients with PH followed in our clinic between 2007 and 2022 were evaluated. Clinical, endocrinologic, pathologic, and radiologic findings and treatment modalities were assessed. Patients diagnosed with CD in the Gastroenterology outpatient clinic in 2020-2022 were included in the study as a control group. Information such as sociodemographic data, year of diagnosis, human leukocyte antigen (HLA) DQ2/8 information, CD-specific antibody levels, pathologic results of duodenal biopsy, treatment received, follow-up status, additional diseases, hormone use, and surgical history was obtained from patient records at PH.In patients diagnosed with PH, a duodenal biopsy was obtained, and the tissue was examined for CD by experienced pathologists. Anti-pituitary antibody (APA) and anti-arginine-vasopressin (AAVP) antibody levels of individuals with PH and CD were measured.

Results: The study included 19 patients with lymphocytic hypophysitis, 30 celiac patients, and 30 healthy controls. When patients diagnosed with lymphocytic hypophysitis were examined by duodenal biopsy, no evidence of CD was found in the pathologic findings. The detection rate of HLA-DQ2/8 was 80% in celiac patients and 42% in PH (p=0.044). (APA and AAVP antibodies associated with PH were tested in two separate groups of patients and in the control group. APA and anti-arginine vasopressin (AAVP) levels in PH, CD and healthy controls, respectively M [IQR]: 542 [178-607];164 [125-243]; 82 [74-107] ng/dL (p=0.001), 174 [52-218]; 60 [47-82]; 59 [48-76] ng/dL (p=0.008) were detected. The presence of an HLA-DQ2/8 haplotype correlates with posterior hypophysitis and panhypophysitis (r=0.598, p=0.04 and r=0.657, p=0.02, respectively).

Conclusion: Although patients with PH were found to have significant levels of HLA-DQ2/8, no CD was found in the tissue. Higher levels of pituitary antibodies were detected in celiac patients compared with healthy controls, but no hypophysitis clinic was observed at follow-up. Although these findings suggest that the two diseases may share a common genetic and autoimmune basis, the development of the disease may be partially explained by exposure to environmental factors.

The Impact of Insulin Induced Lipohypertrophy on Carotid Intima-Media Thickness in Patients with Type 2 Diabetes Mellitus

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Lipohypertrophy (LH) is a major localized complication of insulin therapy. We aimed to investigate the association between insulin-induced LH and carotid intima-media thickness (CIMT) in patients with type 2 diabetes mellitus (DM). A total of 75 patients with DM treated with insulin were included in this study. The insulin injection sites of the patients were evaluated by inspection and palpation and then radiologically with ultrasound. The CIMT of the patients was evaluated using ultrasonography. According to the guideline recommendation, the CIMT cutoff value was taken as 0.9 mm, and the patients were categorized into 2 groups according to the CIMT value and evaluated statistically. The presence of LH (CI: 1.379-30.000; OR = 6.432; P < .05), age (CI: 1.036-1.149; OR = 1091; P < .05), BMI (CI: 1.003-1.262; OR = 1.125; P < .05) and duration of DM (CI: 1.001-1.300; OR = 1.141; P < .05) were independent risk factors for high-CIMT in patients with DM. The most interesting result of this study was that the presence of LH was an independent risk factor for increased CIMT. According to this result, we think that LH may increase the risk of cardiovascular disease as well as being a complication that disrupts the blood glucose regulation of patients with DM and increases the cost of treatment.

Assessment of Osteoprotegerin and RANKL Levels and Several Cardiovascular risk Scoring Systems in Acromegaly

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Purpose: The OPG/RANKL (osteoprotegerin/receptor activator of nuclear factor kappa-B) system, which plays a crucial role in bone metabolism, is also associated with vascular calcification. Acromegaly is characterized by excessive secretion of growth hormone and insulin-like growth factor, and studies have demonstrated an elevated risk of cardiovascular disease in individuals with acromegaly. In this study, our objective was to investigate the relationship between OPG/RANKL and various cardiovascular risk scoring systems.

Methods: We recruited 44 consecutive acromegaly patients and 41 healthy controls with a similar age and gender distribution for this study.

Results: While RANKL levels were significantly higher in the acromegaly group compared to the controls, OPG levels were not found to be significantly different between the two groups. Furthermore, within the acromegaly group, RANKL levels were significantly higher in patients with active acromegaly compared to those with controlled acromegaly. Osteoprotegerin levels showed a positive correlation with the Framingham risk score (FRS) in the acromegaly group. Linear regression analysis revealed an association of OPG with FRS (adjusted R^2 value of 21.7%).

Conclusion: OPG and RANKL may serve as potential markers for assessment of cardiovascular calcification and prediction of the cardiovascular risk status in acromegalic patients.

Expression of Endocan and Vascular Endothelial Growth Factor and Their Correlation with Histopathological Prognostic Parameters in Pheochromocytoma

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Objective: Endocan and vascular endothelial growth factor (VEGF) are markers expressed in various cancer types that are highly vascular, and they have prognostic significance for these cancers. In this study, we aimed to show the expression of endocan and VEGF in pheochromocytoma tumor tissues and to evaluate their correlations with histopathological parameters.

Material and methods: Thirty-eight patients who had been operated for pheochromocytoma were included in the study. As the control group, 28 subjects whose specimens contained normal adrenal medulla tissue were included. The formalin-fixed paraffin-embedded specimens of pheochromocytoma patients were evaluated for Pheochromocytoma of the Adrenal gland Scaled Score (PASS). Sections were then stained for immunohistochemical analysis. The degree of endocan and VEGF positivity was determined by the proportion of stained cells on a negative to strong scale.

Results: Endocan ($p < 0.001$) and VEGF ($p = 0.004$) expressions were found to be significantly higher in the pheochromocytoma group than in the control group. In the pheochromocytoma group, total PASS score ($r = 0.714$; $p < 0.001$) and most of the PASS score components were positively correlated with the level of endocan expression. Median Ki-67 index ($p = 0.010$), total PASS score ($p < 0.001$), tumor cell spindling ($p = 0.048$), and nuclear pleomorphism ($p = 0.030$) were higher in pheochromocytoma with VEGF expression than in those without.

Conclusion: If our findings are supported by studies with a larger sample size, we think that endocan has the potential to be used both as a tumor marker and in predicting malignancy potential in patients with pheochromocytoma, and that the detection of VEGF expression in these tumors is also associated with an increase in malignancy potential.

The Clinical Significance of Calcium/Magnesium Ratio in Primary Hyperparathyroidism: Unveiling a Clinical Association

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Purpose: In previous studies, magnesium (Mg) was found to be lower in cases with more severe primary hyperparathyroidism (PHPT) and higher calcium (Ca) levels. This study evaluated the relationship between serum Mg and serum Ca and phosphorus (P) levels in PHPT and their utility in determining the presence of osteoporosis and nephrolithiasis.

Methods: Patients who were followed up with PHPT between March 2019 and March 2023 were analyzed retrospectively. Biochemical data, renal ultrasonography results, dual-energy x-ray absorptiometry (DEXA) reports, and technetium 99 m sestamibi parathyroid scintigraphy reports were obtained. MgxP, Mg/P, Ca/P, and corrected Ca (cCa)/P values were calculated. The relationships between biochemical parameters and clinical outcomes were evaluated statistically.

Results: A total of 543 patients were included in the study. Patients with nephrolithiasis had higher cCa/Mg or Ca/Mg than those without nephrolithiasis. Additionally, ROC analysis revealed that cCa/Mg greater than 5.24 could identify the presence of nephrolithiasis with a sensitivity of 73.3% and a specificity of 73%. No statistically significant correlation existed between the results of the Mg/P, MgxP, cCa/Mg, Ca/Mg values, and DEXA-bone mineral densitometry(BMD).

Conclusion: Ca/Mg and cCa/Mg ratios in particular seem more valuable in determining the presence of nephrolithiasis than the currently used 24-h urine Ca measurement. Compared to urinary Ca measurements, they are cheaper, more practical, and more accessible.

Effect of Exenatide on Nonalcoholic Steatohepatitis and Inflammation-Related Indices in Diabetic Patients with Non-Alcoholic Fatty Liver Disease

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Purpose: Diabetes mellitus is a chronic disease often associated with nonalcoholic steatohepatitis (NASH) and obesity. Both obesity and NASH are closely related to inflammation. In this study, we examined how exenatide, a glucagon-like peptide 1 analog, affects inflammatory and NASH-related markers in patients with diabetes.

Methods: This retrospective study was conducted on 100 patients who visited our hospital with a diagnosis of type 2 diabetes mellitus. NASH-related indices and inflammatory indices were calculated from data obtained at baseline and at the third month of exenatide treatment. All data were

analyzed first in all patients, and then the patients were grouped according to glycosylated hemoglobin A1c (HbA1c) levels of <8% or ≥8% and body mass index (BMI) of <40 or ≥40 kg/m^2 and their data were reanalyzed.

Results: A highly significant improvement was found in the conventional lipid profile. Among NASH-related indices, the nonalcoholic fatty liver disease (NAFLD) fibrosis score and aspartate aminotransferase-platelet ratio index (APRI) showed statistically significant decreases (P < 0.001 and P = 0.016, respectively). In particular, these significant decreases were independent of BMI and glycemic parameters. No statistically significant change was found in inflammatory indices. The decreases in NAFLD fibrosis score and APRI were statistically more significant in the group with HbA1c ≥8% (P = 0.021 and P = 0.002, respectively) and the group with BMI ≥40 kg/m^2 (P = 0.002 and P = 0.029, respectively).

Conclusions: Besides its established effects, such as lowering fasting plasma glucose levels and weight loss, exenatide exerts positive effects on the conventional lipid profile and NASH-associated indexes.

Early Effect of Exenatide Treatment on Atherogenicity in Patients with Type 2 Diabetes Mellitus

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Objective: Diabetes mellitus is a chronic metabolic disease often associated with hyperlipidemia. High low-density lipoprotein cholesterol (LDLc), high triglyceride, and low high-density lipoprotein cholesterol (HDLc) form the atherogenic lipoprotein profile. In this study, we examined how exenatide, a glucagon-like peptide 1 (GLP-1) analog, affects lipid profile and atherogenic indices in patients with diabetes.

Methods: 100 patients diagnosed with type 2 diabetes mellitus (T2DM) participated in this retrospective study. Clinical and laboratory data of the patients were obtained before exenatide treatment and at the 12th week. From the lipid profile, Atherogenicity Plasma Index (AIP), Castelli Risk Index I (CRI-I), Castelli Risk Index II (CRI-II), Atherogenic Coefficient (AC), triglyceride (TG)/HDLc, TG- Glucose index (TyG) and TyG-Body Mass Index (BMI) data were calculated.

Results: There was a significant improvement in body weight (BW), BMI, fasting plasma glucose (FPG), glycosylated hemoglobin (HbA1c), and conventional lipid profile after exenatide treatment. Statistically, significant decreases were observed in atherogenicity indices TyG index, TyG-BMI index, CRI-I, CRI-II, AIP, and AC indices ($p < 0.05$). This improvement in TG/HDLc, TyG index, CRI-I, CRI-II, AIP and AC indices was independent of HbA1c and BMI. Especially in patients with BMI ≥ 40 kg/m^2, TyG-BMI index (p:0.01), a statistically significant decrease was observed in TyG index, TyG-BMI index, CRI-I, and AIP values in patients with HbA1c ≥8% (p:0.001, p:0.016, p:0.047, p:0.008).

Conclusion: In addition to its commonly known effects such as lowering FPG levels and weight loss, exenatide has been observed to have a positive effect on traditional lipid profiles and atherogenicity-related indices. In addition to its antidiabetic effect, it should be considered in diabetic patients in treatment options for atherosclerotic cardiovascular prevention.

Risk Factors, Use of Preventive Drugs, and Cardiovascular Events in Diabetes Mellitus: The PURE Türkiye Cohort

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Background: The risk of cardiovascular disease is correlated with the frequency and control of associated risk factors in diabetes mellitus and may vary according to country. We evaluated risk factors for cardiovascular disease, cardiovascular events, and the use of preventive medications in patients with diabetes mellitus using the Prospective Urban and Rural Epidemiological Türkiye cohort.

Methods: Patients with diabetes mellitus versus without diabetes mellitus were compared for risk factors, cardioprotective drugs (angiotensin-converting enzyme inhibitors or angiotensin-II receptor antagonists, statins, and antiplatelets), and cardiovascular events. The primary outcome was major cardiovascular events (composite of cardiovascular death, myocardial infarction, stroke, or heart failure).

Results: Among 4041 participants, 549 (13.6%) had diabetes mellitus. The mean age (54.8 ± 8.4 vs. 49.3 ± 9.0 years, P <.001) and proportion of women (65.4% vs. 59.9%, P =.014) were higher in diabetics compared with non-diabetics. Hypertension, history of coronary heart disease, and use of statin, antiplatelets, and angiotensin-converting enzyme inhibitors or angiotensin-II receptor antagonists were more common in diabetics; however, the use of these medications at baseline was lower than optimal even in patients with diabetes mellitus and concomitant coronary heart disease (statin 31.2%, antiplatelets 46.9%, and angiotensin-converting enzyme inhibitors or angiotensin-II receptor antagonists 54.7%). During 11.5 years of follow-up, major cardiovascular events occurred in 288 (7.1%) patients, and the risk was higher in diabetics [hazard ratio (95% confidence interval) 1.71 (1.30-2.24); P <.001]. The increase in the risk of future events was comparable for those with diabetes mellitus alone without cardiovascular disease [hazard ratio 1.62 (1.20-2.20)] versus those with cardiovascular disease alone without diabetes mellitus [hazard ratio 1.31 (0.83-2.07)] and was additive in those with both conditions [hazard ratio 2.79 (1.65-4.69)]. The risk of major coronary events (myocardial infarction, angina, percutaneous, or surgical coronary intervention) was also higher in diabetes mellitus [hazard ratio 1.64 (1.26-2.15); P <.001].

Conclusion: Patients with diabetes mellitus have a higher risk of major cardiovascular events, and the risk is comparable to that observed in those with cardiovascular disease but no diabetes mellitus. The use of preventive medicines for cardiovascular diseases is disturbingly low in diabetics.

Evaluation of Growth Hormone Deficiency in Women with Unexplained Infertility

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Growth Horm IGF Res. 2024 Jan 23:74:101571.doi: 10.1016/j.ghir.2024.101571. PMID: 38280246 DOI: 10.1016/j.ghir.2024.101571

Purpose: Growth hormone (GH) has been recognized to play a regulatory role in female reproduction. It has been reported that infertile GH deficient patients regained fertility after GH replacement. The frequency of GH deficiency is not established in patients diagnosed with unexplained infertility. Here, we aim to present the prevalence of GH deficieny in this patient group.

Methods: We included patients diagnosed with unexplained infertility throughout 18 months. Insulin tolerance test (ITT) and glucagon stimulation tests (GST) were performed and insufficient response to both tests was required for the diagnosis of GH deficiency.

Results: Twenty-five patients were included in the study, the mean age was 27.4 ± 4.5 years and the median duration of infertility was 60 months (min:14, max:120). Two patients were GH deficient according to GST and 14 to ITT. Two patients (8%) showed lack of response on both tests and were diagnosed with GH deficiency.

Conclusion: The rate of GH deficiency among women with unexplained infertility was 8% in this preliminary study. There is need for further studies with larger patient groups to verify the results.

An Old Friend, a New Insight: Calcitonin Measurement in Serum and Aspiration Needle Washout Fluids Significantly Increases The Early And Accurate Detection of Medullary Thyroid Cancer

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Background: The sensitivity of cytological (CY) evaluation after fine-needle aspiration (FNA) for detecting medullary thyroid carcinoma (MTC) is a subject of controversy. The routine use of serum calcitonin (CT) in patients with thyroid nodules is not universally adopted. The authors conducted CT screening of FNA washout fluid (FNA-CT) to address the diagnostic challenges. The objective was to assess the contributions of serum CT, FNA cytology (FNA-CY), and FNA-CT to the diagnosis.

Methods: Between February 2019 and June 2022 (group 1), the authors prospectively screened the CT of patients with thyroid nodules. Both FNA-CY and FNA-CT were performed for patients with persistently elevated CT values. The sensitivity of FNA-CY, serum CT, and FNA-CT for accurate diagnosis was evaluated. Additionally, the authors retrospectively examined data from patients with thyroid nodules before CT screening (2008-2019) (group 2). They compared the characteristics of MTC patients in groups 1 and 2.

Results: MTC was identified in 30 patients (0.25%) in group 1 and 19 (0.07%) in group 2. A FNA-CT cutoff value of 4085.5 pg/mL detected MTC with a sensitivity of 96.8%, and a serum CT cutoff value of 28.3 pg/mL detected MTC with a sensitivity of 86.7%. In contrast, FNA-CY detected MTC with a sensitivity of 42.4%. In group 1, 18 patients (60%) with MTC were diagnosed with microcarcinoma, whereas only two patients (10.5%) in group 2 had microcarcinoma.

Conclusions: This study detected MTC earlier by routinely measuring serum CT in all patients with nodular thyroid disease and performing FNA-CT in those with elevated values. FNA-CT and serum CT sensitivities were significantly higher than those of FNA-CY. This study revealed different FNA-CT cutoff values compared to other studies, emphasizing the need for determining clinic-specific cutoff values.

Evaluation of Management of Patients with Postoperative Permanent Hypoparathyroidism. How Close Are We To The Targets?

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Background: Postoperative hypoparathyroidism (PO-HypoPT) is a complication usually seen after thyroid surgery. PO-HypoPT, which lasts longer than 6 months is defined permanently. The aim of this study was to evaluate how close permanent PO-HypoPT patients can approach target values.

Methods: One hundred seven patients who were followed-up with permanent diagnosis of PO-HypoPT between 2016-2020 were included in the study. The study protocol includes serum albumin corrected total calcium (Alb-sCa), phosphate (P), Ca-P product, and 24 h urine calcium measurements. Laboratory measurements of the patients include the values recorded in 4-year visits and in the last visit. In addition, radiological reports of renal/abdominal ultrasound and cranial tomography examinations performed in our hospital for any reason during this period were also reviewed.

Results: When looking at the total measurements in the 4-year period, the Alb-sCa level was below the target in most of the measurements (68.1%). P level was higher than normal in 296 (46.2%) measurements. Twenty-four h urine ca excretion was measured 185 times in total visits, and 81 (43.7%) of these measurements showed hypercalciuric values. The patient's latest visit measurements were evaluated on 4 targets (Alb-sCa, P, Ca-P product and 24 h urine Ca excretion). The number of patients meeting all four targets was only 21 (19.6%). Six (7.5%) patients had kidney stones or nephrocalcinosis. Three (0.09%) patients with imaging had calcification in the basal ganglia.

Conclusions: Our study shows that the management of the patients with PO-HypoPT is suboptimal with active vitamin D and cholecalciferol treatment.

Evaluation of The Reliability And Readability of Chatgpt-4 Responses Regarding Hypothyroidism During Pregnancy

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Hypothyroidism is characterized by thyroid hormone deficiency and has adverse effects on both pregnancy and fetal health. Chat Generative Pre-trained Transformer (ChatGPT) is a large language model trained with a very large database from many sources. Our study was aimed to evaluate the reliability and readability of ChatGPT-4 answers about hypothyroidism in pregnancy. A total of 19 questions were created in line with the recommendations in the latest guideline of the American Thyroid Association (ATA) on hypothyroidism in pregnancy and were asked to ChatGPT-4. The reliability and quality of the responses were scored by two independent researchers using the global quality scale (GQS) and modified DISCERN tools. The readability of ChatGPT was assessed used Flesch Reading Ease (FRE) Score, Flesch-Kincaid grade level (FKGL), Gunning Fog Index (GFI), Coleman-Liau Index (CLI), and Simple Measure of Gobbledygook (SMOG) tools. No misleading information was found in any of the answers. The mean mDISCERN score of the responses was 30.26 ± 3.14; the median GQS score was 4 (2-4). In terms of reliability, most of the answers showed moderate (78.9%) followed by good (21.1%) reliability. In the readability analysis, the median FRE was 32.20 (13.00-37.10). The years of education required to read the answers were mostly found at the university level [9 (47.3%)]. Although ChatGPT-4 has significant potential, it can be used as an auxiliary information source for counseling by creating a bridge between patients and clinicians about hypothyroidism in pregnancy. Efforts should be made to improve the reliability and readability of ChatGPT.

The Relationship Between Temporal Muscle Thickness and Disease Activity in Cushing's Disease

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Objective: This study aimed to investigate the relationship between hypercortisolism and temporal muscle thickness (TMT) in Cushing's disease (CD).

Methods: A retrospective review of medical records was conducted for patients with CD who presented to our clinic between 2012 and 2022. Biochemical data and TMT measurements from sella imaging were evaluated during diagnosis and the first postoperative year.

Results: A total of 44 patients were included in the study, with an average age of 43.9 years, of which 38 were female. The mean TMT at the time of diagnosis was 19.07 ± 1.71 mm, with no significant difference between males and females (p = 0.097), and no correlation between the TMT and age at diagnosis (p = 0.497). There was an inverse relationship between TMT and serum cortisol levels, 24-h UFC, and midnight salivary cortisol at the time of diagnosis of CD ($p < 0.05$, for all). One year after surgery, TMT significantly increased in all patients compared to baseline ($p < 0.001$). Furthermore, patients who achieved postoperative remission had significantly higher TMT values compared to those who did not achieve remission (p = 0.043). Among the patients who achieved remission, those who achieved remission through surgery had significantly higher TMT compared to those who could not reach remission with surgery and patients who started medical treatment and achieved biochemical remission (p = 0.01). Patients with severe myopathy and sarcopenia had significantly lower TMT values than the others ($p < 0.001$).

Conclusion: Temporal muscle thickness was found to be associated with disease activity and disease control in Cushing's disease.

5 -Alpha-Dihydroxyprogesterone May Contribute to Perceptual Processing and Attention of The Cases with Relapsing Remitting Multiple Sclerosis

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Neurosteroids (NSs) are endogenous steroid hormones, which are synthesised and metabolised within the central nervous system (CNS). NSs aid myelination and glial differentiation and modulate cognitive functions. Herein, we aim to investigate the relationship between NS levels, 5-alpha-dihydroxyprogesterone (5-α-DHP) and allopregnanolone (ALPG), and their relationship with cognitive changes in relapsing remitting MS patients.A total of 43 cases with well controlled, relapsing remitting MS composed the study group. The control group included 21 age and gender matched healthy controls (HC). MS patients were assessed by calculating Expanded Disability Status Scale (EDSS) scores, and the Brief Repeatable Battery of Neuropsychological Tests (BRBNT) was performed in both MS group and HC. Levels of 5-α-DHP and ALPG levels were also evaluated for each participant.The median level of 5-α-DHP was 48 [IQR: 39.2-144.2] pg/mcgL in the MS group and 68.4 [IQR: 57.1-365.9] pg/mcgL in HC ($p = 0.02$). The median ALPG level was found to be 56.5 [IQR: 37.7-75.4] pg/mcgL in the MS group and 43.9 [IQR: 29.4-70.2] pg/mcgL in HC ($p = 0.1$). In both groups 5-α-DHP levels were positively correlated with Symbol Digit Modalities Test (SDMT) scores (HC: $p = 0.01$, $r = 0.3$ and MS: $p = 0.03$, $r = 0.3$). In the MS group, higher EDSS scores were associated with lower scores on Spatial Recall Test (SPART)-Delayed ($p = 0.009$, $r= -0.4$) and SDMT ($p = 0.01$, $r= -0.4$). The disease duration was negatively correlated with the scores on SPART-Immediate, SPART-Delayed and SDMT ($p = 0.02$, $r= -0.4$; $p = 0.005$, $r= -0.4$ and $p = 0.05$, $r= -0.3$).5-α-DHP may be lower even in well-controlled cases. 5-α-DHP may contribute to better perceptual processing and attention in cases with MS.

A Radiomic Signature Based on Magnetic Resonance Imaging to Determine Adrenal Cushing's Syndrome

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Purpose: The aim of this study was to develop radiomics signature-based magnetic resonance imaging (MRI) to determine adrenal Cushing's syndrome (ACS) in adrenal incidentalomas (AI).

Material and methods: A total of 50 patients with AI were included in this study. The patients were grouped as nonfunctional adrenal incidentaloma (NFAI) and ACS. The lesions were segmented on unenhanced T1-weighted (T1W) in-phase (IP) and opposed-phase (OP) as well as on T2-weighted (T2-W) 3-Tesla MRIs. The LASSO regression model was used for the selection of potential predictors from 111 texture features for each sequence. The radiomics scores were compared between the groups.

Results: The median radiomics score in T1W-Op for the NFAI and ACS were -1.17 and -0.17, respectively ($p < 0.001$). Patients with ACS had significantly higher radiomics scores than NFAI patients in all phases ($p < 0.001$ for all). The AUCs for radiomics scores in T1W-Op, T1W-Ip, and T2W were 0.862 (95% CI: 0.742-0.983), 0.892 (95% CI: 0.774-0.999), and 0.994 (95% CI: 0.982-0.999), respectively.

Conclusion: The developed MRI-based radiomic scores can yield high AUCs for prediction of ACS.

Nociceptive Flexion Reflex in Small Fibers Neuropathy and Pain Assessments†

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Background: The nociceptive flexion reflex (NFR) is a polysynaptic and multisegmental spinal reflex that develops in response to a noxious stimulus and is characterized by the withdrawal of the affected body part. The NFR possesses two excitatory components: early RII and late RIII. Late RIII is derived from high-threshold cutaneous afferent A-delta fibers, which are prone to injury early in the course of diabetes mellitus (DM) and may lead to neuropathic pain. We investigated NFR in patients with DM with different types of polyneuropathies to analyze the role of NFR in small fiber neuropathy (SFN).

Methods: We included 37 patients with DM and 20 healthy participants of similar age and sex. We performed the Composite Autonomic Neuropathy Scale-31, modified Toronto Neuropathy Scale, and routine nerve conduction studies. We grouped the patients into large fiber neuropathy (LFN), SFN, and no overt neurological symptom/sign groups. In all participants, NFR was recorded on anterior tibial (AT) and biceps femoris (BF) muscles after train stimuli on the sole of the foot, and NFR-RIII findings were compared.

Results: We identified 11 patients with LFN, 15 with SFN, and 11 with no overt neurological symptoms or signs. The RIII response on the AT was absent in 22 (60%) patients with DM and 8 (40%) healthy participants. The RIII response on the BF was absent in 31 (73.8%) patients and 7 (35%) healthy participants (P = .001). In DM, the latency of RIII was prolonged, and the magnitude was reduced. Abnormal findings were seen in all subgroups; however, they were more prominent in patients with LFN compared to other groups.

Conclusions: The NFR-RIII was abnormal in patients with DM even before the emergence of the neuropathic symptoms. The pattern of involvement before neuropathic symptoms was possibly related to an earlier loss of A-delta fibers.

The Diurnal Change of Thyroid-Stimulating Hormone and The Effect of This Change on Thyroid Functions in Patients with Chronic Kidney Disease

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Purpose: Thyroid-stimulating hormone (TSH) has a pulsatile and circadian rhythm in healthy individuals. We aimed to evaluate the diurnal changes of free thyroid hormones and serum TSH levels in patients with end-stage renal failure (ESRF) whose thyroidal functions are at normal ranges.

Methods: Thirty hemodialysis patients with chronic renal failure and without a known thyroidal disease who are over 18 and 35 healthy individuals were included. The serum TSH, free T3, and free T4 levels were examined among the patient and control group which were taken at 8:00 a.m., 4:00 p.m., and 0:00 a.m.

Results: Twenty-two (73.3%) patients were male, and the mean age of the patient group was 64 (sd = 14.45 years). Seventeen (48.6%) of the control group were female, and the mean age was 31.9 (sd = 6.4 years). Serum free T3 levels, measured at three different time points (8:00 a.m., 4:00 p.m., and 0:00 a.m.), were significantly lower in the patient group than in the control group and serum free T4 levels were measured at three different time points (8:00 am, 4:00 p.m., and 0:00 a.m.) were significantly higher in the patient group than in the control group. Serum TSH levels were higher in the patient group than in the control group at 08:00, and were lower at 24:00 ($p < 0.001$). The nocturnal increase of serum TSH level under 0.525 suggested diurnal rhythm disruption with 83% sensitivity and 87% specificity.

Conclusion: The nocturnal serum TSH increase is not seen in ESRF patients who did not have a thyroid disease. We think that not observing a nocturnal TSH increase could be an early indication of the sick euthyroid syndrome.

Clinical Characteristics of Adult and Paediatric Patients with Familial Hypercholesterolemia: A Real-Life Cross-Sectional Study From The Turkish National Database

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Background and aims: Familial hypercholesterolemia (FH) is the most common cause of premature atherosclerotic cardiovascular disease (ASCVD). Türkiye is among the countries with the highest rate of ASCVD. However, no population-based study has been published so far on the prevalence of FH, demographic and clinical characteristics, burden of ASCVD, treatment compliance, and attainment of low-density lipoprotein cholesterol (LDL-C) targets.

Methods: We performed a study using the Turkish Ministry of Health's national electronic health records involving 83,063,515 citizens as of December 2021 dating back 2016. Adults fulfilling the diagnostic criteria of definite or probable FH according to the Dutch Lipid Network Criteria (DLNC), and children and adolescents fulfilling the criteria of probable FH according to the European Atherosclerosis Society (EAS) Consensus Panel report formed the study population (n = 157,790). The primary endpoint was the prevalence of FH.

Results: Probable or definite FH was detected in 0.63% (1 in 158) of the adults and 0.61% (1 in 164) of the total population. The proportion of adults with LDL-C levels >4.9 mmol/L (190 mg/dL) was 4.56% (1 in 22). The prevalence of FH among children and adolescents was 0.37% (1 in 270). Less than one-third of the children and adolescents, and two-thirds of young adults (aged 18-29) with FH were already diagnosed with dyslipidaemia. The proportion of adults and children and adolescents on lipid-lowering treatment (LLT) was 32.1% and 1.5%, respectively. The overall discontinuation rate of LLT was 65.8% among adults and 77.9% among children and adolescents. Almost no subjects on LLT were found to attain the target LDL-C levels.

Conclusions: This nationwide study showed a very high prevalence of FH in Türkiye. Patients with FH are diagnosed late and treated sub-optimally. Whether these findings may explain the high rates of premature ASCVD in Türkiye needs further investigation. These results denote the urgent need for country-wide initiatives for early diagnosis and effective management of FH patients.

The Acromegaly Treatment Satisfaction Questionnaire (Acro-TSQ): Turkish Adaptation, Validity, and Reliability Study

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Purpose: The patient-reported outcome becomes important to evaluate the situation perceived by the patients and to develop new strategies. This study aims to adapt the Acromegaly Treatment Satisfaction Questionnaire (Acro-TSQ), which was specially developed for patients with acromegaly, into Turkish by conducting a validity and reliability study.

Methods: After the translation and back-translation process, Acro-TSQ was filled in by face-to-face interviews with 136 patients diagnosed with acromegaly and currently receiving somatostatin analogue injection therapy. Internal consistency, content validity, construct validity, and reliability of the scale were determined.

Results: Acro-TSQ had a six-factor structure and explained 77.2% of the total variance in the variable. The Cronbach alpha value calculated for internal reliability showed high internal consistency (Cronbach's alpha = 0.870). Factor loads of all items were found to be between 0.567 and 0.958. As a result of EFA analysis, one item fell into a different factor in the Turkish version of the Acro-TSQ, different from its original form. CFA analysis shows that acceptable fit values are obtained for fit indices.

Conclusion: The Acro-TSQ, a patient-reported outcome tool, shows good internal consistency, and good reliability, suggesting it is an appropriate assessment tool for patients with acromegaly in the Turkish population.

A Reference Center Study in Thyrotropin-Secreting Pituitary Adenomas: Clinicopathological, Therapeutic and Long-Term Follow-Up Outcomes

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Purpose: This study aims to analyze the clinicopathological features, diagnostic steps, and therapeutic results of TSHomas and to reveal the effective factors on remission.

Methods: The clinical, radiological, and pathological features and surgical and endocrinological results of 41 TSHoma cases followed between 2005 and 2022 were retrospectively analyzed. The factors affecting the surgical cure were investigated by comparing the groups with and without remission.

Results: A total of 41 patients (23 male,18 female) were included in the study and the mean age was 42 (31.5-49). Palpitation and headache were the most common complaints. The time from the onset of symptoms to diagnosis was 8 (3-20) months. There were 8 patients with a preoperative clinical and biochemical diagnosis of TSH + GH co-secretion. In the TRH stimulation test, a blunted TSH response was obtained in 18 patients (90.0%). Complete suppression could not be obtained in any of the patients who underwent the T3 suppression test. The median maximum tumor diameter was 19.0 mm (6.8-41). There was microadenoma in 4 (9.8%) patients and macroadenoma in 37 patients (92.8%). Remission was achieved in 31 (75.6%) of 40 patients who underwent endoscopic transsphenoidal surgery (eTSS). The Ki-67 labeling index was 2% (1.00-4.00) in the entire patient group. Preoperative use of antithyroid drugs appears to be significantly associated with surgical cure.

Conclusion: Diagnosis of TSHoma is still full of challenges and dynamic tests remain important. Recognition and good management of inappropriate TSH secretion states affect subsequent surgical outcomes.

Serum Lipoprotein(a) Is Not Associated with Graves' Ophthalmopathy

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Aim: To investigate the relationship of serum lipoprotein(a) [Lp(a)] and other serum lipids with presence of Graves' ophthalmopathy (GO).

Methods: A total of 99 consecutive patients diagnosed with Graves' disease (GD), aged 18-65 years, who had not received prior treatment for GO, thyroid surgery, or radioactive iodine therapy, were recruited between June 2020 and July 2022. In addition, 56 healthy controls (HCs) were included as the control group. All patients underwent an ophthalmological examination, and were classified based on the presence of GO into the GO group (n = 45) and no GO group (n = 54). Fasting blood samples were collected from all participants to analyze serum lipid parameters, including Lp(a), total cholesterol, low-density lipoprotein (LDL) cholesterol, high-density lipoprotein (HDL) cholesterol, and triglycerides.

Results: The median serum levels of Lp(a) were 5.7 [4.3-9.2] in the GO group, 6.7 [3.7-9.9] in the no GO group, and 4.7 [3-7.6] in the HC group. The intergroup comparisons of serum Lp(a) levels showed no significant result. The serum levels of total cholesterol, LDL cholesterol, HDL cholesterol, and triglycerides were also similar between the groups ($P > 0.05$ for all). However, when analyzing only euthyroid GD patients and the control group, the serum LDL cholesterol levels were found to be significantly higher in the euthyroid GO group [median: 132 interquartile range (IQR) (110-148) mg/dL] than in the HCs [median: 96 IQR (94-118) mg/dL] ($P = 0.002$).

Conclusion: The findings of our study did not support the association between serum Lp(a) levels and GO.

Risk of Impulse Control Disorders in Patients with Cushing's Disease: Do Not Blame Cabergoline But Do Not Give Up Caution

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Purpose: To asses risk of new-onset impulse control disorders (ICDs) in patients with Cushing's disease (CD) who initiated cabergoline (CBG) and to determine frequency of ICDs in CBG-treated patients with CD.

Methods: This naturalistic observational study had prospective and cross-sectional arms which included patients at five referral centers based in Istanbul. Patients who were scheduled for CBG were assigned to prospective arm. These patients underwent neuropsychological tests (Barratt Impulsiveness Scale, Minnesota Impulsive Disorders Interview, Questionnaire for Impulsive-Compulsive Disorders in Parkinson's Disease-Rating Scale, Go/No-Go Task, Iowa Gambling Task, and Short Penn Continuous Performance Test) for assessment of impulsivity and psychiatric evaluations at baseline, 3, 6, and 12 months of CBG treatment. Impulsivity and new-onset ICDs were prospectively assessed. Patients with CD with current CBG treatment for ≥ 3 months and matched CBG-naïve patients with CD were included in cross-sectional arm. These patients underwent the same neuropsychological and psychiatric assessments. The impulsivity and frequency of ICDs were compared between CBG-treated and CBG-naïve patients with CD.

Results: The follow-up duration of prospective cohort (n = 14) was 7.3 ± 2.3 months. One patient developed major depressive episode and another patient developed compulsive gambling after CBG. We observed no significant changes in impulsivity scores during follow-up. In cross-sectional arm, CBG-treated (n = 34) and CBG-naïve patients (n = 34) were similar in impulsivity scores and frequency of ICDs [3 patients (8.8%) vs. 2 patients (5.9%) respectively, p = 1.0].

Conclusion: CBG-treated patients with CD appeared to have a low risk of ICDs, suggesting that CBG still holds promise as a safe agent in CD.

Current Position of Gliclazide and Sulfonylureas in the Contemporary Treatment Paradigm for Type 2 Diabetes: A Scoping Review

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The increasing burden of type 2 diabetes (T2D), in relation to alarming rise in the prevalence; challenges in the diagnosis, prevention, and treatment; as well as the substantial impact of disease on longevity and quality of life, is a major concern in healthcare worldwide. Sulfonylureas (SUs) have been a cornerstone of T2D pharmacotherapy for over 60 years as oral antidiabetic drugs (OADs), while the newer generation SUs, such as gliclazide modified release (MR), are known to be associated with low risk of hypoglycemia in addition to the cardiovascular neutrality. This scoping review aimed to specifically address the current position of gliclazide MR among other SUs in the contemporary treatment paradigm for T2D and to provide a practical guidance document to assist clinicians in using gliclazide MR in real-life clinical practice. The main topics addressed in this paper include the role of early and sustained glycemic control and use of SUs in T2D management, the properties of gliclazide MR in relation to its effectiveness and safety, the use of gliclazide therapy in special populations, and the place of SUs as a class and gliclazide MR specifically in the current T2D treatment algorithm.

Clinical Features of Generalized Lipodystrophy in Turkey: A Cohort Analysis

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Aim: To describe the Turkish generalized lipodystrophy (GL) cohort with the frequency of each complication and the death rate during the period of the follow-up.

Methods: This study reports on 72 patients with GL (47 families) registered at different centres in Turkey that cover all regions of the country. The mean ± SD follow-up was 86 ± 78 months.

Results: The Kaplan-Meier estimate of the median time to diagnosis of diabetes and/or prediabetes was 16 years. Hyperglycaemia was not controlled in 37 of 45 patients (82.2%) with diabetes. Hypertriglyceridaemia developed in 65 patients (90.3%). The Kaplan-Meier estimate of the

median time to diagnosis of hypertriglyceridaemia was 14 years. Hypertriglyceridaemia was severe (≥ 500 mg/dl) in 38 patients (52.8%). Seven (9.7%) patients suffered from pancreatitis. The Kaplan-Meier estimate of the median time to diagnosis of hepatic steatosis was 15 years. Liver disease progressed to cirrhosis in nine patients (12.5%). Liver disease was more severe in congenital lipodystrophy type 2 (CGL2). Proteinuric chronic kidney disease (CKD) developed in 32 patients (44.4%) and cardiac disease in 23 patients (31.9%). Kaplan-Meier estimates of the median time to diagnosis of CKD and cardiac disease were 25 and 45 years, respectively. Females appeared to have a more severe metabolic disease, with an earlier onset of metabolic abnormalities. Ten patients died during the follow-up period. Causes of death were end-stage renal disease, sepsis (because of recurrent intestinal perforations, coronavirus disease, diabetic foot infection and following coronary artery bypass graft surgery), myocardial infarction, heart failure because of dilated cardiomyopathy, stroke, liver complications and angiosarcoma.

Conclusions: Standard treatment approaches have only a limited impact and do not prevent the development of severe metabolic abnormalities and early onset of organ complications in GL.

Effects of Empagliflozin Against Indomethacin Induced Gastric Mucosa

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Background: Sodium-glucose cotransporter 2 (SGLT2) inhibitors (SGLT2i) are considered a new class antidiabetic agent, as well as lowering blood sugar, it has many positive effects. This study aimed to investigate the effects of SLGT2i on the gastric mucosa.

Methods: We investigated the effects of empagliflozin on indomethacin-induced gastritis using 48 male Wistar Albino rats. We performed histopathological evaluations of gastric mucosa tissue. And we studied the levels of serum disulfide, native thiol, total thiol, and ischemia modified albumin, disulfide/native thiol ratio (SSSH), native thiol/total thiol percent ratio (SH total SH), and disulfide/total thiol percent ratio (SS total SH).

Results: We found that empagliflozin increased mucin production in rat gastric mucosa. Besides, we observed milder inflammation findings and lower gastritis scores in the empagliflozin receiving groups than the placebo groups. Native thiol, total thiol, and disulfide levels were lower in the indomethacin-induced gastritis groups.

Conclusions: This study is the first to investigate the effect of empagliflozin on the gastrointestinal tract in a rat model. We concluded that empagliflozin increased mucin production and revealed positive effects in an indomethacin-induced gastritis model.

Menstrual Changes After COVID-19 Infection and COVID-19 Vaccination

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Int J Clin Pract. 2022 Oct 27:2022:3199758. doi: 10.1155/2022/3199758. eCollection 2022. PMID: 36349056 PMCID: PMC9633189 DOI: 10.1155/2022/3199758

Background: Several factors such as stress, depression, infection, and vaccination influenced the menstrual cycle in women during the coronavirus disease 2019 (COVID-19) pandemic. We investigated whether there were changes in the menstrual cycle in women after COVID-19 vaccination or infection and, if so, the nature of the change.

Methods: This study was designed as a descriptive, cross-sectional study. A face-to-face survey was conducted among menstruating women aged 18-50 years from May 31 to July 31, 2022. Women were inquired about their first three menstrual cycles that occurred after COVID-19 infection or vaccination.

Results: Of 241 women with COVID-19 infection, 86 (35.7%) mentioned that they experienced various changes in their menstrual patterns in the first three cycles after infection. Of 537 participants who received various COVID-19 vaccines, 82 (15.1%) stated that they experienced changes in their menstrual patterns after vaccination. The incidence of postvaccination menstrual change was higher in women who received Pfizer-BioNTech and Sinovac (CoronaVac) vaccines. Only 10.9% of women who reported a change in their menstrual pattern after vaccination or infection consulted a physician.

Conclusion: COVID-19 infection and vaccination can affect the menstrual cycle in women. It is important to be aware of the menstrual changes after COVID-19 infection and vaccination and to warn and inform women about this issue.

Alterations in Serum miR-126-3p Levels Over Time, a Marker of Pituitary Insufficiency Following Head Trauma

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Introduction: Traumatic brain injuries (TBIs) pose a high risk of pituitary insufficiency development in patients. We have previously reported alterations in miR-126-3p levels in sera from patients with TBI-induced pituitary deficiency.

Methods: To investigate why TBI-induced pituitary deficiency develops only in some patients and to reveal the relationship between miR-126-3p with hormone axes, we used mice that were epigenetically modified with miR-126-3p at the embryonic stage. These modified mice were subjected to mild

TBI (mTBI) according to the Marmarou's weight-drop model at 2 months of age. The levels of miR-126-3p were assessed at 1 and 30 days in serum after mTBI. Changes in miR-126-3p levels after mTBI of wild-type and miR-126-3p* modified mouse lines validated our human results. Additionally, hypothalamus, pituitary, and adrenal tissues were analyzed for transcripts and associated serum hormone levels.

Results: We report that miR-126-3p directly affects hypothalamus-pituitary-adrenal (HPA) axis upregulation and ACTH secretion in the acute phase after mTBI. We also demonstrated that miR-126-3p suppresses Gnrh transcripts in the hypothalamus and pituitary, but this is not reflected in serum FSH/LH levels. The increase in ACTH levels in the acute phase may indicate that upregulation of miR-126-3p at the embryonic stage has a protective effect on the HPA axis after TBI. Notably, the most prominent transcriptional response is found in the adrenals, highlighting their role in the pathophysiology of TBI.

Conclusion: Our study revealed the role of miR-126-3p in TBI and pituitary deficiency developing after TBI, and the obtained data will significantly contribute to elucidating the mechanism of pituitary deficiency development after TBI and development of new diagnostic and treatment strategies.

Association of Skin Autofluorescence and Carotid Intima-Media Thickness in Acromegaly Patients

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Background: The Pituitary Tumors Centers of Excellence (PTCOE) concept was established to provide a multimodal approach with careful management of comorbidities. Acromegaly, one of the main concerns of PTCOE per se, leads to increased mortality rates of which cardiovascular disease is an important cause. Increased skin autofluorescence (SAF) was shown to be associated with carotid intima-media thickness (CIMT), a well-established marker of atherosclerosis, and consequently cardiovascular complications. This study aimed to evaluate SAF and CIMT in association with anthropometric, clinical, and biochemical parameters in acromegaly patients and healthy controls.

Methods: The study group included 138 acromegaly patients and 127 healthy controls from the Department of Endocrinology and Metabolism Disease, Marmara University Medical School. Growth hormone, insulin-like growth factor I, lipids, glucose, insulin levels were assessed. Advanced glycation end products (AGEs) were measured by the auto-fluorescence reader. CIMT was measured from the common carotid artery wall on B-mode ultrasound.

Results: CIMT and SAF levels were significantly higher in the acromegaly group than the control group. There was a positive correlation between SAF and CIMT both in the total cohort and acromegaly patients. The presence of acromegaly, age, and SAF were the determining factors of CIMT in the whole study cohort.

Conclusions: Our study is the first to examine the relationship between SAF and CIMT in acromegaly patients. We found higher CIMT and enhanced SAF in the acromegaly group compared to the control group with a significant positive correlation in between. The presence of acromegaly was related to increased SAF levels and CIMT. SAF was associated with CIMT in acromegaly patients. Implementation of CIMT and SAF evaluation in this clinical setting may improve cardiovascular complications, particularly in the PTCOE.

New Tools for Bone Health Assessment in Secreting Pituitary Adenomas

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Trends Endocrinol Metab. 2023 Apr;34(4):231-242. doi: 10.1016/j.tem.2023.01.006. Epub 2023 Mar 2. PMID: 36869001 DOI: 10.1016/j.tem.2023.01.006

Pituitary hormones regulate skeletal physiology, and excess levels affect bone remodeling and alter bone microstructure. Vertebral fractures (VFs) are an early phenomenon of impaired bone health in secreting pituitary adenomas. However, they are not accurately predicted by areal bone mineral density (BMD). Emerging data demonstrate that a morphometric approach is essential for evaluating bone health in this clinical setting and is considered to be the gold standard method in acromegaly. Several novel tools have been proposed as alternative or additional methods for the prediction of fractures, particularly in pituitary-driven osteopathies. This review highlights the novel potential biomarkers and diagnostic methods for bone fragility, including their pathophysiological, clinical, radiological, and therapeutic implications in acromegaly, prolactinomas, and Cushing's disease.

Recurrent Cushing's Disease in Adults: Predictors and Long-Term Follow-Up

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Horm Metab Res. 2023 Aug;55(8):520-527. doi: 10.1055/a-2047-6017. Epub 2023 Apr 4.PMID: 37015254 DOI: 10.1055/a-2047-6017

Cushing's disease (CD) is characterized by endogenous hypercortisolism that is associated with increased mortality and morbidity. Due to high recurrence rates in CD, the determination of high-risk patients is of paramount importance. In this study, we aimed to determine recurrence rates and clinical, laboratory, and histological predictors of recurrence in a high volume single-center. This retrospective study included 273 CD patients operated in a single pituitary center between 1997 and 2020. The patients with early postoperative remission were further grouped according to recurrence status (recurrent and sustained remission groups). Demographic, radiologic, laboratory, pathologic, and follow-up clinical data of the patients were analyzed

and compared between groups. The recurrence rate was 9.6% in the first 5 years; however, the overall recurrence rate was 14.2% in this study. Higher preoperative basal ACTH levels were significantly correlated with CD recurrence even with ACTH levels adjusted for tumor size, Ki-67 levels, and tumoral invasion. Recurrence rates were significantly higher in patients with ACTH levels higher than 55 pg/ml, tumor diameter>9.5 mm, and if adrenal axis recovery was before 6 months. The severity of hypercortisolism, morbidities, and demographic factors except age were not predictive factors of recurrence. Based on our study data, younger age at diagnosis, a diagnosis of osteoporosis, higher preoperative ACTH levels, larger tumor size, invasive behavior, higher Ki 67 index, and early recovery of the adrenal axis during the postoperative period attracted attention as potential predictors of recurrent disease.

Do Androgens Predict Cardiovascular Risk Including Cardiotrophin-1 Levels in Patients with Obese and Lean Polycystic Ovary Syndrome

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Acta Endocrinol (Buchar). 2022 Oct-Dec;18(4):466-473. doi: 10.4183/aeb.2022.466. PMID: 37152878 PMCID: PMC10162820 DOI: 10.4183/aeb.2022.466

Introduction: We aimed to investigate Cardiotrophin-1 (CT-1) levels along with other markers of cardiovascular disease and the association of androgen levels with these parameters in both lean and overweight or obese PCOS patients.

Material and methods: The study included 90 overweight or obese PCOS patients with metabolic syndrome (MS) and 80 lean PCOS patients without MS. The control group consisted of 140 healthy females. Anthropometric measurements, plasma glucose, insulin, lipid and hormone profile, homocysteine, hs-CRP, CT-1 levels and carotid-IMT were evaluated in all study subjects.

Results: Fasting insulin, HOMA values were significantly higher in obese PCOS patients. Total testosteron levels were higher in both PCOS groups with respect to both controls. Serum homocysteine, hs-CRP, CT-1 and carotid-IMT values were significantly higher in both PCOS groups compared to controls (p=0.001, pCIMT: 0.005). CT-1 was positively correlated with insulin, HOMA, total testosterone, homocysteine, hs-CRP and carotid IMT. After multiple regression analysis, CT-1 was significantly positively correlated with total testosterone, hs-CRP and carotid IMT.

Conclusions: CT-1 was associated with other cardiovascular risk markers and its use as a cardiovascular risk marker might be suggested. Cardiovascular risk was increased even in lean PCOS patients without MS and it might be associated with elevated androgen levels.

Third Trimester Physiological Hypercortisolemia May Protect From Postpartum Depression and Stress

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Eur Rev Med Pharmacol Sci. 2023 Apr;27(7):3016-3021. doi: 10.26355/eurrev_202304_31935. PMID: 37070904 DOI: 10.26355/eurrev_202304_31935

Objective: This study was aimed to evaluate the impact of physiological alterations in cortisol milieu on mood changes during late pregnancy and postpartum.

Patients and methods: A total of 77 healthy pregnant subjects were prospectively evaluated after 36 weeks of gestation and at 3-4 weeks postpartum. Free cortisol (FC) was calculated using Coolen's equation and the free cortisol index (FCI) was defined as serum Total cortisol/Cortisol-binding globulin. Concurrently, status of depression, anxiety and stress were graded using Beck Depression Inventory, Beck Anxiety Inventory and Perceived Stress Scale. Statistical analysis was performed and p<0.05 was considered statistically significant.

Results: Higher FC levels during late pregnancy were associated with lower scores on stress and depression early postpartum, albeit the latter was not statistically significant. Additionally, as FCI increased during late pregnancy both the scores on stress and depression decreased during early postpartum.

Conclusions: Increased cortisol levels during the latter periods of pregnancy may have long-lasting protective effects. They may enable the mother to cope with the changing and demanding conditions during postpartum.

Clinical Impact of Glucagon-Like Peptide-1 Receptor Analogs on The Complications of Obesity

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Obes Facts. 2023;16(2):149-163. doi: 10.1159/000526808. Epub 2022 Nov 8. PMID: 36349778 PMCID: PMC10028372 DOI: 10.1159/000526808

Background: Obesity is a chronic disease associated with increased morbidity and mortality due to its complications. The aims of obesity treatment are primarily to accomplish weight loss, and prevention or treatment of its complications. Lifestyle changes along with behavioral therapy constitute the first-line treatment of obesity followed by pharmacotherapy. Glucagon-like peptide receptor analogs (GLP-1 RAs) are among the approved pharmacotherapy options. Their central effect on suppressing appetite results in considerable weight loss. However, their effect on the complications of obesity has not been very well recognized. This review aims to analyze the effects of GLP-1 RAs on the complications of obesity, as diabetes mellitus, hypertension, nonalcoholic steatohepatitis (NASH), cardiovascular diseases, polycystic ovary syndrome, infertility, obstructive sleep apnea (OSA), osteoarthritis, cancer and central nervous system problems.

Summary: Data from preclinical studies and clinical trials have been thoroughly evaluated. Effects regarding the

complications as far as the scope of this review have covered can be summarized as blood glucose lowering, blood pressure lowering, resolution of NASH, improving major cardiovascular events, improving fertility and sex hormone levels, and improvement in OSA symptoms and in cognitive scores. Although the mechanisms are not fully elucidated, it is clear that the effects are not solely due to weight loss, but some pleiotropic effects like decreased inflammation, oxidative stress, and fibrosis also play a role in some of the complications.

The Potential Antioxidant Effect of N-Acetylcysteine on X-Ray Ionizing Radiation-Induced Pancreas Islet Cell Toxicity

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Biochem Biophys Res Commun. 2023 Dec 10:685:149154.doi: 10.1016/j.bbrc.2023.149154. Epub 2023 Oct 27. PMID: 37913693 DOI: 10.1016/j.bbrc.2023.149154

Purpose: Previous research has highlighted the impact of X-ray irradiation-induced organ damage, on cancer patients after radiation therapy. The ionizing radiation-induced oxidative stress causes injury to the pancreatic islet cells of Langerhans. We used histopathological, immunohistochemical, and biochemical analyses to examine α- and β-cells in the islets of Langerhans in rats undergoing whole-body x-ray ionizing radiation, a group of which was treated with NAC.

Material and methods: Twenty-four male rats were randomly divided into 3 groups, one control, and two experimental groups. Group I (Control) was administered only saline solution (0.09% NaCl) by oral gavage for 7 days. Group II (IR) was administrated whole body single dose 6 Gray ionizing radiation (IR) and saline solution (0.09% NaCl) by oral gavage for 7 days. Group III (IR + NAC) was administered 300 mg/kg NAC (N-acetylcysteine) by oral gavage for 7 days, 5 days before, and 2 days after 6 Gray IR application.

Results: In the X-ray irradiation group, we observed diffuse necrotic endocrine cells in the islets of Langerhans. In addition, we found that Caspase-3, malondialdehyde (MDA) levels increased, and insulin, glucagon, and glutathione (GSH) levels decreased in the IR group compared to the control group. In contrast, we observed a decrease in Caspase-3, and MDA levels in necrotic endocrine cells, and an increase in insulin, glucagon, and GSH levels in the IR + NAC group compared to the IR group.

Conclusion: This study provides evidence for the beneficial effects of N-acetyl cysteine on islets of Langerhans cells with X-ray ionizing-radiation-induced damage in a rat model.

Effect of Sensor-Augmented Patch Pump with Predictive Low-Glucose Suspend Feature Compared to Multiple-Dose Insulin in Patients with Brittle Type 1 Diabetes

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Objective: The conventional approach to brittle diabetes is the treatment of underlying causes and optimization with multiple-dose insulin injections. The goal of multiple-dose insulin therapy is to exactly mimic physiological insulin secretion; however, it often results in hypoglycemia. This study investigates the effectiveness of continuous subcutaneous insulin infusion therapy with a patch pump with the sensor augmented with predictive low-glucose suspend algorithm system in patients with uncontrolled type 1 diabetes who were treated with multiple-dose insulin and have high glycated hemoglobin values.

Methods: The data of patients whose glycemic control could not be achieved with multiple-dose insulin therapy and who were switched to sensor-augmented tubeless pump with predictive lowglucose suspend feature (Medtrum A7+ TouchCare patch pump and integrated A7+ continuous glucose monitoring system) were analyzed retrospectively.

Results: A total of 16 patients (male: 9; 56.3%) were included. After 3 months of the sensor-augmented pump with predictive low-glucose suspend treatment, patients' median (interquartile range) glycated hemoglobin level decreased to 7.55 (1.43) from 9.20 (3.55) (P=.008). Time below 56 mg/dL was 0.34%, time between 56 and 70 mg/dL was 1.01%, time between 70 and 180 mg/dL was 72.90%, time above 180 mg/dL was 25.67%, time between 70and 250 mg/dL was 95.98%, and time above 250 mg/dL was 2.76%.

Conclusions: A pump system with predictive low-glucose suspend feature improves glycemic targets in patients with brittle uncontrolled type 1 diabetes without the expense of hypoglycemia compared to multiple-dose insulin treatment.

Characteristics of Specialists Treating Hypothyroid Patients: the "THESIS" Collaborative

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Introduction: Thyroid specialists influence how hypothyroid patients are treated, including patients managed in primary care. Given that physician characteristics influence patient care, this study aimed to explore thyroid specialist profiles and associations with geo-economic factors.

Methods: Thyroid specialists from 28 countries were invited to respond to a questionnaire, Treatment of Hypothyroidism in Europe by Specialists: an International Survey (THESIS). Geographic regions were defined according to the United Nations Statistics Division. The national economic status was estimated using World Bank data on the gross national income per capita (GNI per capita).

Results: 5,695 valid responses were received (response rate 33·0%). The mean age was 49 years, and 65·0% were female. The proportion of female respondents was lowest in Northern (45·6%) and highest in Eastern Europe (77·2%) (p <0·001). Respondent work volume, university affiliation and private practice differed significantly between countries (p<0·001). Age and GNI per capita were correlated inversely with the proportion of female respondents (p<0·01). GNI per capita was inversely related to the proportion of respondents working exclusively in private practice (p<0·011) and the proportion of respondents who treated >100 patients annually (p<0·01).

Discussion: THESIS has demonstrated differences in characteristics of thyroid specialists at national and regional levels, strongly associated with GNI per capita. Hypothyroid patients in middle-income countries are more likely to encounter female thyroid specialists working in private practice, with a high workload, compared to high-income countries. Whether these differences influence the quality of care and patient satisfaction is unknown, but merits further study.

Türkiye Endokrinoloji ve Metabolizma Derneği Bülteni

Türkiye Endokrinoloji ve Metabolizma Derneği'nce üç ayda bir çevrimiçi yayınlanır

Yayın Türü: Yaygın süreli

TEMD Adına Sahibi: Prof. Dr. Mustafa Cesur

Sorumlu Yazı İşleri Müdürleri:
Prof. Dr. Ayşe Kubat Üzüm, Prof. Dr. Mine Adaş

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