

# TÜRKİYE ENDOKRİNOLOJİ VE METABOLİZMA DERNEĞİ BÜLTENİ



Üç ayda bir yayımlanır • Üyelere ücretsiz olarak gönderilir

Sayı 54 • Nisan – Mayıs – Haziran - 2016

## 38.

## TÜRKİYE ENDOKRİNOLOJİ ve METABOLİZMA HASTALIKLARI KONGRESİ TAMAMLANDI

“38. Türkiye Endokrinoloji ve Metabolizma Hastalıkları Kongresi” bu yıl Cornelia Diamond Hotel Antalya’da 11-15 Mayıs 2016 tarihleri arasında, 1260 kişinin katılımı ile gerçekleşti. Kongre bünyesinde **“Tiroid Ultrasonografi Kursu”** ve **“2. Ulusal Lipid Sempozyumu”** düzenlendi.

Kongremizde her yıl olduğu bu yıl da Genç Araştırmacı ve sözlü – poster bildiri ödülleri verildi.

Bu yıl “Genç Araştırmacı Ödülü”nü almaya, Doç. Dr. Nujen Çolak Bozkurt hak kazandı. Genç Araştırmacımız **“Adacık Hücre Nakli Çalışmaları”** ile ilgili sunum yaptı.

Kongremizde toplam 342 bildiri sunuldu. Bilimsel kurul tarafından yapılan değerlendirmeler sonucunda en iyi sözlü ve poster bildiri ödülleri 14 Mayıs günü sahiplerine iletildi.

Toplantıda 15 konferans, 20 panel, 6 interaktif vaka oturumu, 5 sözlü bildiri oturumu yapıldı. 5’i yabancı olmak üzere toplam 170 konuşmacı ve oturum başkanı bilimsel programda görev aldı. Ayrıca, bu sene için 3 ayrı çalışma grubunun teşhis, tedavi ve izlem klavuzlarında son yıllarda yaptıkları değişiklikler ve nedenleri katılımcılarla paylaşıldı.



## 38. Kongremizden kareler...





## Ödül alan bildiriler

### SÖZLÜ BİLDİRİ BİRİNCİLİK ÖDÜLÜ

#### S 13 - AKROMEĞALİ HASTALARINDA KANSER SIKLIĞI

Rövşen Hasanov<sup>1</sup>, Özgür Demir<sup>1</sup>, Murat Cinel<sup>1</sup>, Şule Canlar<sup>1</sup>, Çağlar Keskin<sup>1</sup>, Asena Gökçay Canpolat<sup>1</sup>, İmge Berna Aydoğan<sup>1</sup>, Mustafa Şahin<sup>1</sup>, Rifat Emral<sup>1</sup>, Murat Faik Erdoğan<sup>1</sup>, Sevim Güllü<sup>1</sup>, Vedia Tonyukuk Gedik<sup>1</sup>, Ali Rıza Uysal<sup>1</sup>, Nilgün Başkal<sup>1</sup>, Demet Çorapçıoğlu<sup>1</sup>

<sup>1</sup>Ankara Üniversitesi Tıp Fakültesi, İç Hastalıkları Anabilim Dalı, Endokrinoloji ve Metabolizma Hastalıkları Bilim Dalı

### SÖZLÜ BİLDİRİ İKİNCİLİK ÖDÜLÜ

#### S 19 - TİP 2 DİYABETİK SIÇAN BÖBREĞİNDE KLF4 GEN EKSPRESYON DÜZEYİNİN İNCELENMESİ

Zeynep Mine Coşkun<sup>1</sup>, Melike Ersöz<sup>1</sup>, Aynur Acar<sup>1</sup>

<sup>1</sup>İstanbul Bilim Üniversitesi, Fen Edebiyat Fakültesi, Moleküler Biyoloji ve Genetik Bölümü, İstanbul

### SÖZLÜ BİLDİRİ ÜÇÜNCÜLÜK ÖDÜLÜ

#### S 15 - AKROMEĞALİK HASTALARDA ÖSTROJEN RESEPTÖRÜ POZİTİFLİĞİ ÖNEMLİ Mİ?

Fahri Bayram<sup>1</sup>, Selma Öztürk<sup>2</sup>, Hamiyet Dönmez-Altuntaş<sup>3</sup>, Figen Öztürk<sup>4</sup>, Ali Kurtsoy<sup>5</sup>, Serkan Şenol<sup>6</sup>, Yasin Şimşek<sup>7</sup>, Ferhat Gökay<sup>8</sup>, Hatice Karaköse Doğan<sup>8</sup>, Rıfki Üçler<sup>9</sup>, Bülent Tucer<sup>5</sup>, Yusuf Özkan<sup>10</sup>, Aslı Sezgin-Çağlar<sup>1</sup>, Cumali Gökçe<sup>11</sup>

<sup>1</sup>Erciyes Üniversitesi Tıp Fakültesi, Endokrinoloji ve Metabolizma Hastalıkları Bilim Dalı, Kayseri<sup>2</sup> Erciyes Üniversitesi Tıp Fakültesi, İç Hastalıkları Anabilim Dalı, Kayseri<sup>3</sup> Erciyes Üniversitesi Tıp Fakültesi, Tıbbi Biyoloji Bilim Dalı, Kayseri<sup>4</sup> Erciyes Üniversitesi Tıp Fakültesi, Tıbbi Patoloji Bilim Dalı, Kayseri<sup>5</sup> Erciyes Üniversitesi Tıp Fakültesi, Beyin ve Sinir Cerrahisi Bilim Dalı, Kayseri<sup>6</sup> Erciyes Üniversitesi Tıp Fakültesi, Radyoloji Bilim Dalı, Kayseri<sup>7</sup> Memorial Hastanesi, Endokrinoloji ve Metabolizma Hastalıkları, Kayseri<sup>8</sup> Kayseri Eğitim ve Araştırma Hastanesi, Endokrinoloji ve Metabolizma Hastalıkları, Kayseri<sup>9</sup> Yüzüncüyıl Üniversitesi Tıp Fakültesi, Endokrinoloji ve Metabolizma Hastalıkları, Van<sup>10</sup> Fırat Üniversitesi Tıp Fakültesi, Endokrinoloji ve Metabolizma Hastalıkları Bilim Dalı, Elazığ<sup>11</sup> Tayfur Ata Sökmen Tıp Fakültesi, Endokrinoloji ve Metabolizma Hastalıkları Bilim Dalı, Hatay.

### POSTER BİLDİRİ BİRİNCİLİK ÖDÜLÜ

#### P01 - 4 CM VE ÜZERİNDEKİ TİROİD NODÜLLERİNDE FALSE NEGATİFLİK ORANI VE MALİGNİTE ORANI

Nagihan Beştepe<sup>1</sup>, Didem Özdemir<sup>1</sup>, Abbas Ali Tam<sup>1</sup>, Fatma Dilek Dellal<sup>1</sup>, Aydan Kılıçarslan<sup>2</sup>, Ömer Parlak<sup>3</sup>, Reyhan Ersoy<sup>1</sup>, Bekir Çakır<sup>1</sup>

<sup>1</sup>Ankara Yıldırım Beyazıt Üniversitesi Tıp Fakültesi, Atatürk Eğitim ve Araştırma Hastanesi, Endokrinoloji ve Metabolizma Hastalıkları, Ankara

<sup>2</sup>Ankara Yıldırım Beyazıt Üniversitesi Tıp Fakültesi, Atatürk Eğitim ve Araştırma Hastanesi, Patoloji Anabilim Dalı, Ankara<sup>3</sup> Ankara Yıldırım Beyazıt Üniversitesi Tıp Fakültesi, Atatürk Eğitim ve Araştırma Hastanesi, Genel Cerrahi Anabilim Dalı, Ankara

### POSTER BİLDİRİ İKİNCİLİK ÖDÜLÜ

#### P287 - AKROMEĞALİ HASTALARINDA KEMİK DÖNGÜSÜ, KEMİK MİNERAL DENSİTOMETRİSİ VE VERTEBRAL KIRIK RİSKİ

Meliha Melin Uygur<sup>1</sup>, Erkin Arıbal<sup>2</sup>, Dilek Gogas Yavuz<sup>1</sup>

<sup>1</sup>Marmara Üniversitesi Tıp Fakültesi, Endokrin ve Metabolizma Hastalıkları Bilim Dalı, <sup>2</sup>Marmara Üniversitesi Tıp Fakültesi, Radyoloji Anabilim Dalı

### POSTER BİLDİRİ ÜÇÜNCÜLÜK ÖDÜLÜ

#### P215 - D VİTAMİNİ EKSİKLİĞİ OLAN PREDİYABETİK VE DİYABETİK HASTALARDA D VİTAMİNİ REPLASMANININ İLERİ GLİKOZİLLENME PARAMETRELERİ ÜZERİNE ETKİSİ

Bahar Tekin<sup>1</sup>, F. Buket Bayram<sup>1</sup>, Dilek Gogas Yavuz<sup>2</sup>

<sup>1</sup>Marmara Üniversitesi Tıp Fakültesi, İç Hastalıkları Anabilim Dalı, İstanbul<sup>2</sup> Marmara Üniversitesi Tıp Fakültesi, Endokrinoloji ve Metabolizma Bilim Dalı, İstanbul

## 13. Mezuniyet Sonrası Hipertansiyon Eğitim Kursu

Türkiye Endokrinoloji ve Metabolizma Derneği, Obezite - Lipid Metabolizması- Hipertansiyon Çalışma Grubu'nun organize ettiği, Afyon Kocatepe Üniversitesi'nin katkılarıyla **"13. Mezuniyet Sonrası Hipertansiyon Eğitim Kursu"** 16-17 Nisan 2016 tarihlerinde NG Güral Hotel/ Afyon'da gerçekleştirildi.

### 13. Mezuniyet Sonrası Hipertansiyon Eğitim Kursunda;

- Hipertansiyon tanım ve sınıflama, doğru tanı koyma,
- Hipertansiyon etyopatogenezi,
- Sekonder hipertansiyon nedenleri ve kimlerde araştırılması gerektiği,
- Hipertansiyonun neden olduğu organ hasarları,
- Hipertansiyonun nonfarmakolojik ve farmakolojik tedavileri,
- 

Özel durumlarda görülen hipertansiyonlar ve tedavileri örnek vakalarla anlatıldı. Konuşma sonrası yapılan tartışma kısmında katılımcılar hipertansiyonla ilgili sorular sorup cevap alma imkânı buldular.

Kursa yaklaşık 85 kadar değişik branşdan hekim (Endokrinoloji uzmanı, Dahiliye uzmanı, Aile hekimi ve pratisyen hekim) katıldı. Kurs, hipertansiyon konusunda tecrübeli yaklaşık 20 hocanın katılımıyla gerçekleşti. Katılımcılar genel olarak çok faydalı bir toplantı olduğunu, bilgilerini yenileme adına çok istifade ettiklerini ifade ettiler.



## TEMĐ ASİSTAN BULUŐMASI

30 Nisan-1 Mayıs 2016 tarihleri arasında "TEMĐ Diabetes Mellitus Çalışma ve Eğitim Grubu" tarafından gerçekleştirilen "Türkiye Endokrinoloji ve Metabolizma Derneği Asistan Buluşması: Tip 2 DM Tedavisi: Teoriden Pratiğe" adlı toplantımız başarı ile tamamlandı.

170 dahiliye asistanı katılım gösterdi; genel olarak diyabet tedavisi ve güncel yaklaşımlar konuları üzerinde duruldu. İlk gün teorik bilgi aktarımı şeklinde geçen toplantı ikinci gün gerçek hasta vakaları üzerinden çalıştay şeklinde gerçekleştirildi.



## TİROKURSLAR...



Bu yıl Tiroid alanında 15. ve 16.sını gerçekleştirdiğimiz Tirokurs toplantılarımızın ilki 19 Mart 2016 tarihinde Bursa Sheraton Otel'de gerçekleştirildi. Toplam 85 katılımcıyla tamamladığımız tirokursumuzda Türkiye Endokrinoloji ve Metabolizma Derneği Tiroid Çalışma Grubu ile birinci basamak hekimlerin tiroid hastalıkları konusunda bilgilendirilmesi sağlandı.

İkinci kursumuz 30 Nisan 2016 tarihinde Ankara Crowne Plaza Hotel'de 132 hekimin katılımıyla gerçekleştirildi. Katılımcı hekimlerin kursa ilişkin geri bildirimleri oldukça pozitif. Soru cevap bölümlerinin son derece yüksek ilgiyle gerçekleştiği etkinliğimiz başarılı bir şekilde tamamlandı.

## Bilimsel Kongreler, Ulusal ve Uluslararası Sempozyumlar

- 14 - 17 Nisan 2016  
**2016 World Congress on Osteoporosis, Osteoarthritis and Musculoskeletal Diseases**  
Malaga, Spain  
<http://www.wco-iof-esceo.org/>
- 11-15 Mayıs 2016  
**38. Türkiye Endokrinoloji ve Metabolizma Hastalıkları Kongresi ve 2. Ulusal Lipid Sempozyumu**  
Cornelia Diamond Otel, Belek, Antalya  
<http://temhk2016.org/2016/>
- 28-31 Mayıs 2016  
**ECE 2016**  
Munich, Germany  
<http://www.ece2016.org/>
- 01 - 04 Haziran 2016  
**European Obesity Summit - EOS 2016**  
Gothenburg, Sweden  
<http://www.obesity-summit.eu/>
- 31 Ağustos - 04 Eylül 2016  
**International Congress of Endocrinology 2016**  
Beijing, China  
<http://www.endosociety.com/events.html>
- 03 - 06 Eylül 2016  
**39<sup>th</sup> Annual Meeting of the ETA 39<sup>th</sup> Annual Meeting of the ETA**  
Hotel Scandic Copenhagen, Denmark  
<http://www.eta2016.com/>
- 21-25 Eylül 2016  
**85<sup>th</sup> Annual Meeting of the American Thyroid Association**  
Denver, Colorado  
[www.thyroid.org/86th-annual-meeting-ata/](http://www.thyroid.org/86th-annual-meeting-ata/)
- 20-23 Ekim 2016  
**EndoBridge 2016**  
Cornelia Diamond Hotel, Belek, Antalya  
[www.endobridge.org](http://www.endobridge.org)
- 19-22 Ekim 2016  
**17<sup>th</sup> Congress of the European Neuroendocrine Association**  
Palazzo Mezzanotte, Milan, Italy  
<http://www.eneassoc.org/>
- 04-05 Kasım 2016  
**12. Hipofiz Sempozyumu**  
Sheraton Hotel, Ankara  
[www.hipofiz2016.org](http://www.hipofiz2016.org)
- 03-07 Mayıs 2017  
**39. Türkiye Endokrinoloji ve Metabolizma Hastalıkları Kongresi**  
Belek/Antalya  
[www.temd.org.tr](http://www.temd.org.tr)

## Kongre, Kurslar ve Sempozyumlar

ENDOCRINE  
SOCIETYEuropean Society  
of Endocrinology  
*the European hormone society*endo bridge  
2016

Bridging the World of Endocrinology

**20-23 October 2016**  
**Cornelia Diamond Hotel**  
**Antalya - Turkey**[www.endobridge.org](http://www.endobridge.org)





# 12. Hipofiz Sempozyumu

4-5 Kasım 2016, Ankara / Sheraton Otel





## Üyelerimizden Literatür Seçmeleri

**IODINE STATUS AMONG PREGNANT WOMEN AFTER  
MANDATORY SALT IODISATION.**Anaforoğlu J<sup>1</sup>, Algün E<sup>1</sup>, İnceçayır Ö<sup>1</sup>, Topbaş M<sup>2</sup>, Erdoğan MF<sup>3</sup>.

Br J Nutr. 2016 Feb 14;115(3):405-10. doi: 10.1017/S0007114515004559. Epub 2015 Nov 24.

I is essential for thyroid hormone synthesis and neurological development. Various changes occur in thyroid hormone metabolism during pregnancy and I requirements increase significantly. The purpose of this study was to investigate I status among pregnant women in Trabzon, formerly a severely I-deficient area but shown to have become I sufficient following mandatory iodisation of table salt based on monitoring studies among school-age children (SAC) in the area. A total of 864 healthy pregnant women with a median age of 28 (25th-75th percentile 17-47) years participated in the study. None of them were using I-containing supplement. All of them were screened for use of iodised salt, obstetric history, thyroid function tests and urinary I concentrations (UIC), and thyroid ultrasonography was performed. Median UIC was 102 (25th-75th percentile=62-143) µg/l. Median UIC of the patients according to trimesters were 122 µg/l at the 1st, 97 µg/l at the 2nd and 87 µg/l at the 3rd trimester. UIC in the 1st trimester was higher compared with the 2nd and 3rd trimesters (P<0.017). Nodules were present in 17.7% of women (n 153). The rate of iodised salt usage among pregnant women was 90.7%. Our study demonstrates that, although the I status among SAC has been rectified, I deficiency (ID) is still prevalent among pregnant women. Current knowledge is in favour of I supplementation in this group. Until the effects of maternal I supplementation in mild ID have been clarified by large-scale prospective controlled trials, pregnant women living in borderline deficient and I-sufficient areas, such as Trabzon city, should receive 100-200 µg/d of I-containing supplements in addition to iodised salt.

**DETERMINATION OF THIOL/DISULPHIDE HOMEOSTASIS IN  
TYPE 1 DIABETES MELLITUS AND THE FACTORS ASSOCIATED  
WITH THIOL OXIDATION.**Ates I<sup>1</sup>, Kaplan M<sup>2</sup>, Yuksel M<sup>3</sup>, Mese D<sup>2</sup>, Alisik M<sup>4</sup>, Erel Ö<sup>4</sup>, Yilmaz N<sup>2</sup>, Güler S<sup>5,6</sup>.

Endocrine. 2016 Jan;51(1):47-51. doi: 10.1007/s12020-015-0784-6. Epub 2015 Nov 7.

In this study, we aimed to examine dynamic thiol/disulfide homeostasis in type 1 diabetes mellitus (T1DM) and identify the factors associated with thiol oxidation. Thirty-eight subjects (18 male, 20 female) diagnosed with T1DM and 38 (17 male, 21 female) healthy volunteers without any known diseases were included in the study. Thiol/disulfide homeostasis concentrations were measured by a newly developed method (Erel & Neselioglu) in this study. After native thiol, total thiol and disulfide levels were determined; measures such as disulfide/native thiol, disulfide/total thiol, and native thiol/total thiol were calculated. In T1DM patients, compared to the control group, disulfide (p = 0.024), disulfide/native thiol (p < 0.001), and disulfide/total thiol (p < 0.001) were determined higher, while native thiol (p = 0.004) and total thiol (p < 0.001) levels were much lower. In the patient group, a positive correlation was determined between c-reactive protein (r = 325, p = 0.007; r = 316, p = 0.010, respectively), fasting blood

glucose (r = 279, p = 0.018; r = 251, p = 0.035, respectively), and glycosylated hemoglobin (r = 341, p = 0.004; r = 332, p = 0.005, respectively) and rates of disulfide/native thiol and disulfide/total thiol. We determined that thiol oxidation increase in T1DM patients compared to the control group. We thought that hyperglycemia and chronic inflammation might be the major cause of increase in oxide thiol form. In order to determine the relationship between the status of autoimmunity and dynamic thiol/disulfide in T1DM, dynamic thiol/disulfide homeostasis in newly diagnosed-antibody positive-T1DM patients is required to be investigated.

**HOW DOES THIOL/DISULFIDE HOMEOSTASIS CHANGE IN  
PREDIABETIC PATIENTS?**Ates I<sup>1</sup>, Kaplan M<sup>2</sup>, Inan B<sup>2</sup>, Alisik M<sup>3</sup>, Erel Ö<sup>3</sup>, Yilmaz N<sup>2</sup>, Güler S<sup>4</sup>.

Diabetes Res Clin Pract. 2015 Nov;110(2):166-71. doi: 10.1016/j.diabres.2015.09.011. Epub 2015 Sep 24.

**Aims:** Our aim was to examine thiol/disulfide homeostasis, which has a critical role in many cellular activities such as antioxidant protection, detoxification, cell growth and apoptosis, in prediabetic patients.

**Methods:** The study population was formed of a total of 250 participants; 125 (54 males, 71 females) of which were newly diagnosed with prediabetes, aged over 18 and who had not received any prior treatment and 125 (52 males, 73 females) healthy volunteers. Prediabetic patients were diagnosed using a glucose tolerance test. In both groups, native thiol-disulfide exchanges were examined using the automated measurement method newly developed by Erel and Neselioglu.

**Results:** When compared to the control group, the native thiol (p<0.001) and total thiol (p=0.008) levels, and the native thiol/total thiol (p=0.022) ratio was lower; while disulfide (p=0.001) level and, disulfide/native thiol (p=0.003) and disulfide/total thiol (p=0.022) ratios were higher in prediabetic patients. A positive correlation was determined between disulfide and the fasting blood glucose levels (r=0.394, p=0.017) and glycolysed hemoglobin (HbA1c) (r=0.307, p=0.011). On the other hand, a negative correlation was determined between native thiol and fasting blood glucose levels (r=-0.335, p=0.004).

**Conclusion:** With this study, we have shown for the first time that thiol oxidation increases in prediabetic patients and that there is a positive correlation between the disulfide and blood glucose and HbA1c levels.

**IS THERE ANY ASSOCIATION BETWEEN PRIMARY  
HYPERPARATHYROIDISM AND OCULAR CHANGES, SUCH AS  
CENTRAL CORNEAL THICKNESS, RETINAL THICKNESS, AND  
INTRAOCULAR PRESSURE?**Baser H<sup>1,2</sup>, Cuhaci N<sup>3</sup>, Topaloglu Ö<sup>3</sup>, Yulek F<sup>4</sup>, Ugurlu N<sup>4</sup>, Ersoy R<sup>3</sup>, Cagil N<sup>4</sup>, Cakir B<sup>3</sup>.

Endocrine. 2016 Mar;51(3):545-50. doi: 10.1007/s12020-015-0724-5. Epub 2015 Aug 29.

Ocular changes are commonly encountered in various endocrine disorders. However, only a few studies have reported ocular changes



in patients with primary hyperparathyroidism (PHPT). Here, we examined the central corneal thickness (CCT), retinal thickness (RT), and intraocular pressure (IOP), and their relationships with serum intact parathyroid hormone (iPTH), calcium (Ca), and phosphorus (P) levels in patients with PHPT. Thirty-seven eyes of 37 PHPT patients were compared with 43 eyes of 43 age- and sex-matched normal subjects. A detailed ophthalmologic examination, including CCT, RT, and IOP, was performed. CCT and IOP in PHPT patients were significantly higher than controls ( $p = 0.024$  and  $p = 0.038$ , respectively). No statistically significant difference was detected in RT between the two groups ( $p = 0.730$ ). iPTH levels were positively correlated with CCT and IOP ( $r = 0.304$ ,  $p = 0.006$  and  $r = 0.249$ ,  $p = 0.026$ , respectively). No significant correlation was found between iPTH levels and RT ( $p > 0.05$ ), and between serum Ca levels, and RT, CCT, and IOP (all,  $p > 0.05$ ). While there was a negative correlation between serum P levels and CCT ( $r = -0.264$ ,  $p = 0.018$ ), no correlation was observed between serum P levels, and RT and IOP (both,  $p > 0.05$ ). Using multiple regression analyses, iPTH, serum Ca, and serum P levels were found to have no significant associations with CCT, IOP, and RT (all,  $p > 0.05$ ). There was no significant association between PHPT, and CCT, RT, and IOP. We postulate that the identification of ocular aspects of PHPT is significant, and further studies related to this condition are required.

#### ELEVATED CIRCULATING LEVELS OF BETATROPHIN ARE ASSOCIATED WITH POLYCYSTIC OVARY SYNDROME.

Calan M<sup>1</sup>, Yilmaz O<sup>2</sup>, Kume T<sup>3</sup>, Unal Kocabas G<sup>4</sup>, Yesil Senses P<sup>5</sup>, Senses YM<sup>6</sup>, Temur M<sup>2</sup>, Gursoy Calan O<sup>3</sup>.

*Endocrine*. 2016 Jul;53(1):271-9. doi: 10.1007/s12020-016-0875-z. Epub 2016 Feb 1.

Betatrophin is a newly identified hormone determined to be a potent inducer of pancreatic beta cell proliferation in response to insulin resistance in mice. Polycystic ovary syndrome (PCOS) is an inflammatory-based metabolic disease associated with insulin resistance. However, no evidence is available indicating whether betatrophin is involved in women with PCOS. The objective of this study was to ascertain whether betatrophin levels are altered in women with PCOS. This study was conducted in secondary referral center. This cross-sectional study included 164 women with PCOS and 164 age- and BMI-matched female controls. Circulating betatrophin levels were measured using ELISA. Metabolic and hormonal parameters were also determined. Circulating betatrophin levels were significantly elevated in women with PCOS compared with controls ( $367.09 \pm 55.78$  vs.  $295.65 \pm 48.97$  pg/ml,  $P < 0.001$ ). Betatrophin levels were positively correlated with insulin resistance marker homeostasis model assessment of insulin resistance (HOMA-IR), free-testosterone, high-sensitivity C-reactive protein (hs-CRP), atherogenic lipid profiles, and BMI in PCOS. Multivariate logistic regression analyses revealed that the odds ratio for PCOS was 2.51 for patients in the highest quartile of betatrophin compared with those in the lowest quartile (95 % CI 1.31-4.81,  $P = 0.006$ ). Multivariate regression analyses showed that HOMA-IR, hs-CRP, and free-testosterone were independent factors influencing serum betatrophin levels. Betatrophin levels were increased in women with PCOS and were associated with insulin resistance, hs-CRP, and free-testosterone in these patients. Elevated betatrophin levels were found to increase the odds of having PCOS. Further research is needed to elucidate the physiologic and pathologic significance of our findings.

#### DIVERTED SLEEVE GASTRECTOMY WITH ILEAL TRANSPOSITION IN OVERWEIGHT, OBESE, AND MORBIDLY OBESE PATIENTS WITH TYPE 2 DIABETES: RESULTS OF 1-YEAR FOLLOW-UP.

Celik A<sup>1</sup>, Cagiltay E<sup>2</sup>, Ugale S<sup>3</sup>, Asci M<sup>4</sup>, Celik BO<sup>4</sup>, Karaca C<sup>5</sup>, Abdul-Ghani M<sup>6</sup>.  
*Surg Obes Relat Dis*. 2016 Mar-Apr;12(3):541-9. doi: 10.1016/j.soard.2015.09.027. Epub 2015 Oct 1.

**Background:** Bariatric surgery is an effective intervention for morbidly obese individuals, and it normalizes the level of glycemia in the majority of patients with type 2 diabetes mellitus (T2DM).

**Objectives:** The primary aim of the study was to examine the efficacy of diverted sleeve gastrectomy with ileal transposition on weight loss and glycemic control in overweight, obese, and morbidly obese T2DM patients. The secondary aim was to examine the relationship between the effect of surgery and body mass index (BMI).

**Setting:** Metabolic surgery clinic.

**Methods:** This study was performed between October 2011 and August 2014, and mean duration of follow-up was 1 year. A total of 131 patients with T2DM were included. Ileal transposition with sleeve gastrectomy were performed in all patients. Each patient received a standard mixed meal tolerance test; plasma glucose, C-peptide, and insulin concentrations were measured before and 1 hour after the test. Postoperative alterations in BMI were noted.

**Results:** Mean BMI decreased from  $33.1 \pm 5$  to  $23.5 \pm 2$  kg/m<sup>2</sup> at 1 year, with the magnitude of weight loss correlating with baseline weight ( $P < .0001$ ). There were marked decreases in fasting plasma glucose concentration and mean glycosylated hemoglobin levels at 1 year. Neither the decrease in fasting plasma glucose or glycosylated hemoglobin correlated with the decrease in weight. The homeostasis model assessment index decreased from  $9.6 \pm 1.2$  to  $2.2 \pm 2$ ,  $P < .0001$ , and the Matsuda index for insulin sensitivity increased from  $2.2 \pm 2$  to  $7.8 \pm 4$ ,  $P < .0001$ . Despite the improvement in insulin sensitivity, surgery caused a 4-fold increase in insulin secretion ( $P < .01$ ).

**Conclusion:** Diverted sleeve gastrectomy with ileal transposition is effective in glycemic control in patients with T2DM; however, this was not dependent on preoperative BMI values.

#### FAMILIAL PARTIAL LIPODYSTROPHY LINKED TO A NOVEL PEROXISOME PROLIFERATOR ACTIVATOR RECEPTOR - $\gamma$ (PPARG) MUTATION, H449L: A COMPARISON OF PEOPLE WITH THIS MUTATION AND THOSE WITH CLASSIC CODON 482 LAMIN A/C (LMNA) MUTATIONS.

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*Diabet Med*. 2016 Jan 12. doi: 10.1111/dme.13061. [Epub ahead of print]

**Aims:** To describe the phenotype associated with a novel heterozygous missense PPARG mutation discovered in a Turkish family and to compare the fat distribution and metabolic characteristics of subjects with the peroxisome proliferator activator receptor - $\gamma$  (PPARG) mutation with those of a cluster of patients with familial partial lipodystrophy with classic codon 482 Lamin A/C (LMNA) mutations.

**Methods:** The study involved four subjects with familial partial lipodystrophy who had a novel PPARG mutation (H449L) and six subjects with classic codon 482 LMNA mutations (R482W).

**Results:** Compared with subjects with LMNA R482W mutation, fat loss was generally less prominent in subjects with the PPARG H449L mutation. Partial fat loss was limited to the extremities, whilst truncal fat mass was preserved. The PPARG H449L mutation was associated with insulin resistance, hypertriglyceridaemia and non-alcoholic fatty liver disease in all affected subjects, but the severity was variable. Three out of four mutation carriers had overt diabetes or impaired glucose tolerance. Pioglitazone therapy in these three individuals resulted in a modest improvement in their metabolic control, and regular menstrual cycles in the two female subjects.

**Conclusions:** We suggest that relatively modest fat loss in patients with PPARG mutations may render the recognition of the syndrome more difficult in routine clinical practice. The PPARG H449L mutation is associated with insulin resistance and metabolic complications, but their severity is variable among the affected subjects. This article is protected by copyright. All rights reserved.

## OXIDATIVE STRESS AND PERIODONTAL DISEASE IN OBESITY.

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*Medicine (Baltimore).* 2016 Mar;95(12):e3136. doi: 10.1097/MD.0000000000003136.

Periodontal disease is a chronic inflammatory disease of the jaws and is more prevalent in obesity. Local and systemic oxidative stress may be an early link between periodontal disease and obesity. The primary aim of this study was to detect whether increased periodontal disease susceptibility in obese individuals is associated with local and systemic oxidative stress. Accordingly; we analyzed periodontal status and systemic (serum) and local (gingival crevicular fluid [GCF]) oxidative status markers in young obese women in comparison with age-matched lean women. Twenty obese and 20 lean women participated. Periodontal condition was determined by clinical periodontal indices including probing depth, clinical attachment level, gingival index, gingival bleeding index, and plaque index. Anthropometric, hormonal, and metabolic measurements were also performed. Blood and GCF sampling was performed at the same time after an overnight fasting. Serum and GCF total antioxidant capacity (TAOC), and total oxidant status (TOS) levels were determined, and oxidative stress index (OSI) was calculated. Clinical periodontal analyses showed higher gingival index and gingival bleeding index in the obese group ( $P=0.001$  for both) with no significant difference in probing depth, clinical attachment level, and plaque index between the obese and the lean women. Oxidant status analyses revealed lower GCF and serum TAOC, and higher GCF and serum OSI values in the obese women ( $P<0.05$  for all). GCF TOS was higher in the obese women ( $P<0.05$ ), whereas there was a nonsignificant trend for higher serum TOS in obese women ( $P=0.074$ ). GCF TAOC values showed a negative correlation with body mass index, whereas GCF OSI was positively correlated with fasting insulin and low-density lipoprotein-cholesterol levels ( $P<0.05$  for all). Clinical periodontal indices showed significant correlations with body mass index, insulin, and lipid levels, and also oxidant status markers. Our results suggest that young obese, otherwise healthy, women show findings of early periodontal disease (gingival inflammation) compared with age-matched healthy lean

women, and that local/periodontal oxidative stress generated by obesity seems to be associated with periodontal disease.

## MA Y DENTAL EXTRACTION TRIGGER SUBACUTE THYROIDITIS? REPORT OF TWO CASES

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doi: 10.4183/aeb.2015.532

**Introduction:** Subacute thyroiditis (SAT) is a self-limiting thyroid disease associated with a triphasic clinical direction or hyperthyroidism, hypothyroidism and back to normal thyroid function. Precise etiology of this clinical condition is unknown. Generally diagnosis is based on clinical-laboratory parameters. Considerable cases of SAT develop after several types of viral infections. We herein describe two cases that developed SAT after dental extraction.

**Cases:** Two-female patients in the forties ages experienced fever and neck pain after dental extraction. The patients presented elevated sedimentation rates and SAT symptoms. After clinical diagnosis and anti-inflammatory therapy administration, symptoms resolved after one week.

**Conclusion:** We have presented two cases experiencing SAT after dental extraction. The management and possible association with current literature were discussed.

## POSTPRANDIAL PHASE FLUCTUATIONS CAN TRIGGER THE COAGULATION CASCADE

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*Int J Clin Exp Med* 2016;9(3):5891-5901

**Background and aims:** Cardiovascular Diseases (CVD) are the most common causes of mortality and morbidity among patients with type 2 diabetes. Poorly controlled postprandial hyperglycemia contributes to the development of atherosclerosis. Fluctuations of the postprandial glucose levels bring changes in the coagulation system and propensity to thrombosis. Our aim was to determine the change of plasma coagulation parameters like D-Dimer, P-Selectin, Plasminogen activator inhibitor-1 (PAI-1), Prothrombin fragments 1-2 (PTF 1-2) in comparison to the fasting levels in 15 healthy controls and type 2 diabetic patients under treatment of various agents (metformin, insulin secretagog agents and insulin).

**Materials and methods:** Blood samples were withdrawn after 12 h of fasting (min 0) and following breakfast composed of foods proper for each person, at 60th, 90th and 120th minutes. Fasting and 60th, 90th, and 120th minute measurements of glucose, insulin, triglyceride, D-Dimer, P-Selectin, PAI-1, PTF 1-2 had been performed. HbA1c and fructosamine were measured also.

**Results:** Some coagulation parameters tend to be changed at the postprandial phase in diabetics as well as in healthy controls. At the postprandial phase, PAI-1 increased significantly in both healthy controls and in all groups of diabetics. The fasting levels of fibrinogen, D-Dimer and P-Selectin were high in diabetics in comparison to healthy controls. An increase in the levels of P-Selectin, PAI-1 and PTF 1-2 at the postprandial phase was observed in healthy persons. Patients receiving insulin secretagog therapy showed an increase in the postprandial levels of PAI-1 like healthy controls. Patients receiving metformin showed an increase in the postprandial levels of



PAI-1 and PTF 1-2. Postprandial phase changes in patients receiving metformin were similar to healthy controls. Poorly controlled, older patients with longer diabetes duration had been receiving insulin and these mentioned patients' levels of fibrinogen, D-Dimer and P-Selectin were high in the fasting state and showed an increase in PAI-1 at the postprandial phase. Postprandial levels of PTF 1-2 and D-Dimer were high in insulin treated patients. Levels of fibrinogen and D-Dimer were higher in patients with retinopathy. HA1C and fructosamine were correlated with the coagulation parameters like P-selectin, PAI-1 and PTF 1-2 levels. Correlations showed us that not only postprandial hyperglycemia but also accompanying diabetes, obesity, dyslipidemia and hypertension can aggravate this coagulation tendency at the postprandial phase.

**Conclusion:** Postprandial phase changes can trigger postprandial coagulation cascade in diabetics as well as healthy persons.

## EFFECTS OF CAFFEINE AND LYCOPENE IN EXPERIMENTALLY INDUCED DIABETES MELLITUS.

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*Pancreas*. 2016 Apr;45(4):579-83. doi: 10.1097/MPA.0000000000000489.

**Objectives:** Diabetes mellitus (DM) is a global epidemic with increasing prevalence. The disease is chronic in nature, and patients must use antidiabetic drugs or insulin during their lifespan. Because of the difficulty of using injectable insulin preparations, patients and practitioners prefer to use oral antidiabetic drugs for prophylaxis and treatment. There are, however, numerous adverse effects of antidiabetic drugs and rapidly increasing attention is being paid to new nutraceutical drugs with fewer adverse effects. The purpose of this study was to evaluate the effects of caffeine and lycopene on streptozotocin (STZ)-induced DM in rats.

**Methods:** Caffeine and lycopene were administered to the study groups by oral gavages for 1 month whereafter experimental diabetes was induced in 90 rats in 6 groups.

**Results:** There were no pathological effects of lycopene and caffeine on the pancreas. Marked vacuolization and degeneration were observed in STZ-treated groups. Caffeine and lycopene decreased the pathological findings and lowered the blood and urine glucose levels in the rats with STZ-induced DM, whereas these compounds increased serum insulin levels.

**Conclusions:** This study showed that caffeine and lycopene provided protective effects against experimentally induced DM. The protective effects of lycopene were observed to be much greater than those of caffeine.

## THE EFFECT OF THYROID AUTOIMMUNITY ON T-CELL RESPONSES IN EARLY PREGNANCY.

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*J Reprod Immunol*. 2015 Aug;110:61-6. doi: 10.1016/j.jri.2015.04.002. Epub 2015 May 8.

Thyroid autoimmunity (TAI) is common in women of reproductive age. There is a relationship between TAI and recurrent pregnancy loss and infertility. In pregnant patients with thyroid autoimmunity, the T helper-1 (Th1)/T helper-2 (Th2) ratio may shift to a Th1-type response and these activated T lymphocytes may lead to implantation

failure. The aims of this study were to investigate the serum levels of Th1-, Th2-, and T-helper-17-(Th17)-associated cytokines in pregnant patients with TAI, and to evaluate how these cytokines change with l-thyroxine treatment during pregnancy. Twenty pregnant women with TAI diagnosed in the first trimester of pregnancy who were not on l-thyroxine treatment, 14 pregnant women with known TAI before pregnancy already been on l-thyroxine treatment, and 19 pregnant patients without TAI were included in this study. Thyroid function tests, thyroid autoantibodies, and cytokine levels were measured at the first and the second trimesters. In pregnant patients who were diagnosed with TAI in the first trimester, both serum IL-2 levels and IL-17 levels were significantly higher than those of the control group. There were no significant differences between groups for serum IL-4, IL-6, IL-23, IL-10, and IFN $\gamma$  levels. In the second trimester, no significant differences were found between groups for all the cytokines measured. There are significant differences in Th1- and Th17-associated cytokine levels between patients with TAI and the control group in the first trimester. In the second trimester cytokine levels were similar among all groups. This pattern may be associated with the clinical benefits of l-thyroxine treatment.

## ENETS CONSENSUS GUIDELINES UPDATE FOR NEUROENDOCRINE NEOPLASMS OF THE JEJUNUM AND ILEUM.

Niederle B<sup>1</sup>, Pape UF, Costa F, Gross D, Kelestimur F, Knigge U, Öberg K, Pavel M, Perren A, Toumpanakis C, O'Connor J, O'Toole D, Krenning E, Reed N, Kianmanesh R; Vienna Consensus Conference participants. Anlauf M, Bartsch DK, Baudin E, Capdevila J, Caplin M, Cwikla JB, De Herder WW, Delle Fave G, Eriksson B, Falconi M, Ferolla P, Ferone D, Garcia-Carbonero R, Ito T, Jensen RT, Kaltsas G, Klöppel G, Kos-Kudla B, Kwekkeboom D, Pascher A, Ramage JK, Raymond E, Rindi G, Ruszniewski P, Sedlackova E, Sorbye H, Sundin A, Taal B, Weber W, Wiedenmann B, Zheng-Pei Z.

*Neuroendocrinology*. 2016;103(2):125-38. doi: 10.1159/000443170. Epub 2016 Jan 12.

## ENETS CONSENSUS GUIDELINES FOR HIGH-GRADE GASTROENTEROPANCREATIC NEUROENDOCRINE TUMORS AND NEUROENDOCRINE CARCINOMAS.

Garcia-Carbonero R<sup>1</sup>, Sorbye H, Baudin E, Raymond E, Wiedenmann B, Niederle B, Sedlackova E, Toumpanakis C, Anlauf M, Cwikla JB, Caplin M, O'Toole D, Perren A; Vienna Consensus Conference participants. Bartsch DK, Capdevila J, Costa F, De Herder WW, Delle Fave G, Eriksson B, Falconi M, Ferolla P, Ferone D, Gross D, Ito T, Jensen RT, Kaltsas G, Kelestimur F, Kianmanesh R, Klöppel G, Knigge U, Kos-Kudla B, Krenning E, Kwekkeboom D, Öberg K, O'Connor J, Pape UF, Pascher A, Pavel M, Ramage JK, Reed N, Rindi G, Ruszniewski P, Sundin A, Taal B, Weber W, Zheng-Pei Z.

*Neuroendocrinology*. 2016;103(2):186-94. doi: 10.1159/000443172. Epub 2016 Jan 5.

## Duyurular

- “22. Avrupa Endokrinoloji Kongresi” 2020 yılında, derneğimizin ev sahipliğinde İstanbul'da gerçekleştirilecektir.

Avrupa Endokrinoloji Derneği Yönetim Kurulu Üyesi ve Derneğimiz Genel Sekreteri Prof. Dr. Okan Bülent Yıldız, bir yılı aşkın süredir devam eden adaylık sürecinde en son aday şehir sayısını üçe indirdiklerini ve bu hafta yapılan Avrupa Endokrinoloji Kongresi esnasında dernek kongre komitesi ve yönetim kurulu olarak oybirliği ile nihai kararı aldıklarını belirtmiştir.

Buna göre İstanbul, son üç şehir arasında “İngiliz Endokrin Derneği”nin önerdiği Londra ve “Çek Endokrin Derneği”nin önerdiği Prag'ı geride bırakarak kongreye ev sahipliği yapma hakkını elde etmiştir.

## Üyelerimizden Haberler

- Üyelerimizden Uzm. Dr. Eylem Çağiltay (İzmir Asker Hastanesi) "18<sup>th</sup> European Congress of Endocrinology" ECE 2016 kongresi, "ESE Young Investigator Awards" ödülünü almaya hak kazanmıştır.

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## Yeni Profesörlerimiz

Prof. Dr. Şevki Çetinkalp

*Tebrik eder, başarılarının devamını dileriz.*

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