## **TÜRKİYE ENDOKRİNOLOJİ VE METABOLİZMA DERNEĞİ BÜLTENİ**

OSTEOKURS

tamamlandı.

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OSTEO

Osteoporoz ve Metabolik Kemik Hastalıkları Kursu

9 Ocak 2016

kurs

Sayı 53 • Ocak – Şubat – Mart - 2016

Osteoporoz ve Metabolik Kemik Hastalıkları Kursları (OSTEOKURS) uzun bir aradan sonra devam ediyor. Ocak 2016 tarihine İstanbul'da gerçekleşen Osteokurs'a endokrinoloji, iç hastalıları, fizik tedavi ve aile hekimliği uzmanları büyük ilgi gösterdi. 210 kişinin katılımı ile gerçekleşti. Kurs katılımcıları kemik endokrinolojisi ile ilgili güncelleme ihtiyacı olduğunu, kursun bu açıdan çok faydalı olduğu görüşlerini dile getirdiler. Bu yıl içinde 1 Ekim 2016 Ankara, 3 Ekim 2016 İzmir olmak üzere iki osteokurs daha planlanmaktadır.

Muthu Yullar TEMD Yönetim Kurulu

Endokrin Aciller Kursunun 5. si 26 Mart 2016 tarihinde Ankara'da büyük bir katılımla gerçekleşti. Endokrinolojide sık karşılaşılan acil durumların vakalarla ve interaktif olarak ele alındığı kursa 168 kişi katıldı.





4. Adrenal Gonad Sempozyumu, 4-6 Mart 2016 tarihlerinde Kocaeli'nde Prof. Dr. Ş. Erol Bolu Başkanlığında ve Prof. Dr. İlhan Tarkun'un Bilimsel Sekretaryasında 140 hekim katılımı ile başarılı bir şekilde tamamlanmıştır.



#### Kongre, Kurslar ve Sempozyumlar



# 12. Hipofiz Sempozyumu

### 4-5 Kasım 2016, Ankara / Sheraton Otel

Sempozyum Sekreterliği



Prof. Dr. Selçuk Dağdelen Hacettepe Tıp Fakültesi Tel: 03123104308 E posta: selcukdagdelen@yahoo.com www.hipofiz2016.org



#### 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
  Bejing, China
  http://www.endosociety.com/events.
  html
- 03 06 Eylül 2016
  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-annualmeeting-ata/
- 20-23 Ekim 2016
  EndoBridge 2016
  Cornelia Diamond Hotel, Belek, Antalya 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
- 03-07 Mayıs 2017
  39. Türkiye Endokrinoloji ve Metabolizma Hastalıkları Kongresi Belek/Antalya www.temd.org.tr

#### Üyelerimizden Literatür Seçmeleri

#### ACQUIRED PARTIAL LIPODYSTROPHY IS ASSOCIATED WITH INCREASED RISK FOR DEVELOPING METABOLIC ABNORMALITIES.

<u>Akinci B</u><sup>1</sup>, Koseoglu FD<sup>2</sup>, Onay H<sup>3</sup>, Yavuz S<sup>4</sup>, Altay C<sup>5</sup>, Simsir IY<sup>6</sup>, Ozisik S<sup>7</sup>, Demir L<sup>8</sup>, Korkut M<sup>9</sup>, Yilmaz N<sup>10</sup>, Ozen S<sup>11</sup>, Akinci G<sup>12</sup>, Atik T<sup>3</sup>, Calan M<sup>7</sup>, Secil M<sup>5</sup>, Comlekci A<sup>7</sup>, Demir T<sup>7</sup>.

Metabolism. 2015 Sep;64(9):1086–95. doi: 10.1016/j.metabol.2015.06.004. Epub 2015 Jun 10.

**Objective:** Acquired partial lipodystrophy (APL) is a rare disorder characterized by progressive selective fat loss. In previous studies, metabolic abnormalities were reported to be relatively rare in APL, whilst they were quite common in other types of lipodystrophy syndromes.

Methods: In this nationwide cohort study, we evaluated 21 Turkish patients with APL who were enrolled in a prospective follow-up protocol. Subjects were investigated for metabolic abnormalities. Fat distribution was assessed by whole body MRI. Hepatic steatosis was evaluated by ultrasound, MRI and MR spectroscopy. Patients with diabetes underwent a mix meal stimulated C-peptide/insulin test to investigate pancreatic beta cell functions. Leptin and adiponectin levels were measured.

**Results:** Fifteen individuals (71.4%) had at least one metabolic abnormality. Six patients (28.6%) had diabetes, 12 (57.1%) hypertrigylceridemia, 10 (47.6%) low HDL cholesterol, and 11 (52.4%) hepatic steatosis. Steatohepatitis was further confirmed in 2 patients with liver biopsy. Anti-GAD was negative in all APL patients with diabetes. APL patients with diabetes had lower leptin and adiponectin levels compared to patients with type 2 diabetes and healthy controls. However, contrary to what we observed in patients with congenital generalized lipodystrophy (CGL), we did not detect consistently very low leptin levels in APL patients. The mix meal test suggested that APL patients with diabetes had a significant amount of functional pancreatic beta cells, and their diabetes was apparently associated with insulin resistance.

**Conclusions:** Our results show that APL is associated with increased risk for developing metabolic abnormalities. We suggest that close long-term follow-up is required to identify and manage metabolic abnormalities in APL.

#### THE RELATIONSHIP BETWEEN EPICARDIAL FAT TISSUE THICKNESS AND VISCERAL ADIPOSE TISSUE IN LEAN PATIENTS WITH POLYCYSTIC OVARY SYNDROME.

<u>Arpaci D</u><sup>1</sup>, Gurkan Tocoglu A<sup>2</sup>, Yilmaz S<sup>3</sup>, Ergenc H<sup>4</sup>, Tamer A<sup>5</sup>, Keser N<sup>6</sup>, Gunduz H<sup>7</sup>. J Ovarian Res. 2015 Nov 6;8:71. doi: 10.1186/s13048-015-0197-4.

**Background:** Polycystic ovary syndrome (PCOS) is related to metabolic syndrome, insulin resistance, and cardiovascular metabolic syndromes. This is particularly true for individuals with central and abdominal obesity because visceral abdominal adipose tissue (VAAT) and epicardial adipose tissue (EAT) produce a large number of proinflammatory and proatherogenic cytokines. The present study aimed to determine whether there are changes in VAAT and EAT levels which were considered as indirect predictors for subclinical atherosclerosis in lean patients with PCOS.

**Methods:** The clinical and demographic characteristics of 35 patients with PCOS and 38 healthy control subjects were recorded for the present study. Additionally, the serum levels of various biochemical parameters were measured and EAT levels were assessed using 2D-transthoracic echocardiography.

Results: There were no significant differences in mean age (p=0.056) or mean body mass index (BMI) (p=0.446) between the patient and control groups. However, the body fat percentage, waist-to-hip ratio, amount of abdominal subcutaneous adipose tissue, and VAAT thickness were higher in the PCOS patient group than in the control group. The amounts of EAT in the patient and control groups were similar (p = 0.384). EAT was correlated with BMI, fat mass, waist circumference, and hip circumference but not with any biochemical metabolic parameters including the homeostasis model assessment of insulin resistance index or the levels of triglycerides, low-density lipoprotein cholesterol, and high-density lipoprotein (HDL) cholesterol. However, there was a small positive correlation between the amounts of VAAT and EAT. VAAT was directly correlated with body fat parameters such as BMI, fat mass, and abdominal subcutaneous adipose thickness and inversely correlated with the HDL cholesterol level.

Conclusions: The present study found that increased abdominal adipose tissue in patients with PCOS was associated with atherosclerosis. Additionally, EAT may aid in the determination of the risk of atherosclerosis in patients with PCOS because it is easily measured.

#### METABOLIC OUTCOMES OF LAPAROSCOPIC DIVERTED SLEEVE GASTRECTOMY WITH ILEAL TRANSPOSITION (DSIT) IN OBESE TYPE 2 DIABETIC PATIENTS.

**Celik A<sup>1,2</sup>, Ugale S<sup>3</sup>, Ofluoglu H<sup>4</sup>, Vural E<sup>4</sup>, <u>Cagiltay E<sup>5</sup>, Cat H<sup>6</sup>, Asci M<sup>4</sup>, Celik BO<sup>4</sup></u>.** *Obes Surg. 2015 Nov;25(11):2018-22. doi: 10.1007/s11695-015-1671-1***.** 

**Background:** Bariatric surgical techniques are based on mechanical restriction rather than functional restriction. Our purpose is to analyze the outcomes of diverted sleeve gastrectomy with ileal transposition (DSIT) as a mode of functional restrictive therapeutic option for class II and class III obese type 2 diabetes mellitus patients.

Methods: A retrospective analysis was performed on data derived from 159 patients with type 2 diabetes mellitus who underwent DSIT between October 2011 and January 2014. Postoperative changes in body mass index (BMI), HbA1c, cholesterol indexes, and triglycerides, as well as complications and mortality rates, were noted and analyzed.

**Results:** The study group consisted of 88 females and 73 males, with a mean age of 51.8 years. Mean duration of hospital stay was 6.4 (range, 4 to 42) days; mean follow-up was 18.3 months, and no mortality was detected. Mean BMI decreased from 39.33 to 25.51 kg/m(2) (excess BMI loss rate was 75.4 %, p < 0.001). Mean fasting glucose level decreased from 189.8 to 123.5 mg/dl (p < 0.001), and mean postprandial glucose level decreased from 9.24 to 6.14 % 1 year after surgery (p < 0.001). Overall, 88.68 % of patients were off antidiabetic medications at the end of 1 year. Hypertension was diagnosed in 121 of 161 patients preoperatively and resolved in 114 cases (94.2 %, p < 0.001). Triglycerides decreased from a mean of 210.07 to 125.24 mg/dl, and cholesterol decreased from a mean of 208.34 to 163.23 mg/dl (p < 0.001 for each).

**Conclusion:** Our results demonstrate that DSIT provided effective remission rates in all components of metabolic syndrome in obese type 2 diabetic patients with acceptable complication and mortality rates.

#### EFFECT OF ROSIGLITAZONE AND INSULIN COMBINATION THERAPY ON INFLAMMATION PARAMETERS AND ADIPOCYTOKINE LEVELS IN PATIENTS WITH TYPE 1 DM.

**Guclu M<sup>1</sup>, Oz Gul O<sup>2</sup>, <u>Cander S</u><sup>1</sup>, Unal O<sup>3</sup>, Ozkaya G<sup>4</sup>, Sarandol E<sup>5</sup>, Ersoy C<sup>2</sup>.** J Diabetes Res. 2015;2015:807891. doi: 10.1155/2015/807891. Epub 2015 Jul 27.

**Aim:** To investigate the efficacy of combined therapy of insulin and rosiglitazone on metabolic and inflammatory parameters, insulin sensitivity, and adipocytokine levels in patients with type 1 diabetes mellitus (type 1 DM).

**Material and methods:** A total of 61 adults with type 1 DM were randomly and prospectively assigned in open-label fashion to take insulin and rosiglitazone 4 mg/day (n = 30) or insulin alone (n = 31) for a period of 18 weeks while undergoing insulin therapy without acute metabolic complications.

**Results:** Combination therapy did not significantly improve metabolic and inflammatory parameters, insulin sensitivity, and adiponectin levels. While leptin and resistin levels decreased in both groups (group 1: resistin  $6.96 \pm 3.06$  to  $4.99 \pm 2.64$ , P = 0.006; leptin  $25.8 \pm 17.6$  to  $20.1 \pm 12.55$ , P = 0.006; group 2: resistin  $7.16 \pm 2.30$  to  $5.57 \pm 2.48$ , P = 0.031; leptin 16.72  $\pm 16.1$  to  $14.0 \pm 13.4$ , P = 0.007) Hgb and fibrinogen levels decreased only in group 1 (Hgb  $13.72 \pm 1.98$  to  $13.16 \pm 1.98$ , P = 0.015, and fibrinogen  $4.00 \pm 1.08$  to  $3.46 \pm 0.90$ , P = 0.002). Patients in both groups showed weight gain and the incidence of hypoglycemia was not lower.

**Discussion:** The diverse favorable effects of TZDs were not fully experienced in patients with type 1 DM. These results are suggesting that insulin sensitizing and anti-inflammatory characteristics of TZDs were likely to be more pronounced in patients who were not totally devoid of endogenous insulin secretion.

Lasers Med Sci. 2016 Feb;31(2):343–53. doi: 10.1007/s10103–016–1868–0. Epub 2016 Jan 11.

#### NONSURGICAL PERIODONTAL THERAPY WITH/WITHOUT DIODE LASER MODULATES METABOLIC CONTROL OF TYPE 2 DIABETICS WITH PERIODONTITIS: A RANDOMIZED CLINICAL TRIAL.

Koçak E<sup>1</sup>, Sağlam M<sup>2</sup>, Kayış SA<sup>3</sup>, Dündar N<sup>4</sup>, Kebapçılar L<sup>5</sup>, Loos BG<sup>6</sup>, Hakkı SS<sup>1,4</sup>.

In order to evaluate whether nonsurgical periodontal treatment with/without diode laser (DL) decontamination improves clinical parameters, the levels of IL-1β, IL-6, IL-8, intercellular adhesion molecule (ICAM), and vascular cell adhesion molecule (VCAM) in gingival crevicular fluid and metabolic control (HbA1c) in chronic periodontitis (CP) patients with diabetes mellitus type 2 (DM2). Sixty patients with DM2 and CP were randomly assigned into two groups to receive scaling and root planing (SRP, n = 30) or SRP followed by diode laser application (SRP + DL, n = 30). Clinical periodontal and gingival crevicular fluid (GCF) parameters were assessed at baseline, 1, and 3 months after periodontal treatment. HbA1c levels were evaluated at baseline and 3 months post-therapy. Total amounts of cytokines and molecules were analyzed by ELISA. Nonsurgical periodontal treatment with/without DL appeared to improve clinical, biochemical parameters, and glycemic control in DM2 patients (BMI < 25 kg/m(2)) with CP. The SRP+DL group provided better reductions in probing depth (PD) and clinical attachment level (CAL) parameters compared to the SRP group (P < 0.05). Significant reductions were found in the total amounts of GCF levels of IL-1, IL-6, IL-8, ICAM, and VCAM after treatment (P < 0.05). HbA1c levels decreased significantly at 3 months after treatment (P < 0.05). SRP + DL reduced HbA1c levels more significantly compared to SRP alone (0.41 vs. 0.22 %, P < 0.05). SRP, especially in combination with DL, shows improvement of glycemic control for DM2 patients with CP.

#### PROTECTIVE EFFECT OF COLCHICINE ON OVARIAN ISCHEMIA-REPERFUSION INJURY: AN EXPERIMENTAL STUDY.

Kurt RK<sup>1</sup>, Dogan AC<sup>2</sup>, Dogan M<sup>3</sup>, Albayrak A<sup>4</sup>, Kurt SN<sup>3</sup>, Eren F<sup>3</sup>, Okyay AG<sup>5</sup>, Karateke A<sup>5</sup>, Duru M<sup>6</sup>, Fadillioglu E<sup>3</sup>, <u>Delibasi T<sup>7</sup></u>. *Reprod Sci. 2015 May;22(5):545-50. doi: 10.1177/1933719114553065. Epub 2014 Oct 9.* 

**Objective:** The aim of the present study is to investigate the efficiency of colchicine in the experimental rat ovarian torsion model in the light of histological and biochemical data.

Study design: A total of 35 Wistar albino female rats were randomly divided into 5 groups, group 1: (control-sham operated, n = 7); group 2: (torsion/detorsion, n = 7) 2 hours of ischemia and 2 hours of reperfusion; group 3: (torsion/detorsion, n =7), 2 hours of ischemia and 5 days of reperfusion; group 4: (torsion/detorsion, n = 7) 2 hours of ischemia and 2 hours of reperfusion and a signal dose of oral 1 mL/kg colchicine; and group 5: (torsion/detorsion, n = 7), 2 hours of ischemia and 5 days of reperfusion and 5 days of oral 1 mg/kg colchicine. Histopathologic evaluation was performed by a scoring that assesses congestion, bleeding, edema, and cellular degeneration in the ovarian tissue. Catalase, tissue malondialdehyde (MDA), and protein carbonyl levels were calculated.

**Results:** The histopathologic scores, MDA, and protein carbonyl levels in the control and colchicine groups were significantly lower than groups 2 and 3 (P <.001). Catalase activities were significantly higher in the control and colchicine groups than in groups 2 and 3 (P <.001). The results of the histopathologic parameters and biochemical markers showed that protective effects of colchicine treatment persisted up to 5 days.

**Conclusion:** Our study results revealed that colchicine reduced ovarian ischemia-reperfusion injury in experimental rat ovarian torsion model. As the ovarian detorsion is the first choice of the treatment modality in the early phase, antioxidant and antiinflammatory treatment modalities like colchicine might be used to reduce ovarian ischemia-reperfusion injury.

#### PUBLICATION RATE OF ABSTRACTS PRESENTED AT THE ANNUAL CONGRESS OF THE EUROPEAN SOCIETY FOR SURGICAL RESEARCH DURING 2008-2011.

Meral UM<sup>1</sup>, Alakus U, Urkan M, Ureyen O, Oren NC, Ozturk Meral A, <u>Cağıltay E</u>, Can MF.

Eur Surg Res. 2016;56(3-4):132-40. doi: 10.1159/000443608. Epub 2016 Feb 5.

**Background/purpose:** The presentation of scientific studies at major meetings serves to rapidly share study results with the scientific community. On the other hand, full-text publication of abstracts in peer-reviewed journals ensures the dissemination of science. This study examines the publication rate (PR) of meeting abstracts presented at the European Society for Surgical Research (ESSR) congresses and determines/compares the factors affecting the PRs. **Methods:** All presentations at the ESSR congresses held during 2008-2011 were retrospectively assessed. Manuscripts indexed in PubMed were included. The meeting year, journal impact factor (IF) in the publication year, study type, presentation type, time to publication and geographic origin of studies were assessed.

Results: Among a total of 1,368 oral and poster abstracts, 48.7% (n = 391) of the oral presentations (OPs) and 29.7% (n = 168) of the poster presentations (PPs) were published in medical journals indexed in PubMed. The mean IF of the journals was 2.696 (0.17-14.95). The journals that published OPs had a higher IF than the journals in which PPs were published (2.944 vs. 2.118; p < 0.001). The PR was also higher in the OP group than in the PP group of journals (p <0.001). The time to publication was 17.5 months (-166 to 82) and was shorter for PPs than for OPs (14.02 vs. 19.09 months; p = 0.01). According to the study type, experimental studies had a significantly higher PR (53.7%; p < 0.001); however, there was no significant difference in PR in terms of the prospective or retrospective nature of clinical studies. The clinical studies were also compared according to the IF values of the journals in terms of the prospective or retrospective nature of the study, and no significant difference was found (p = 0.62).

**Conclusion:** The ESSR congress is an efficient meeting for researchers from varied surgical disciplines and has a PR equivalent to that of similar scientific meetings. The congress has achieved a PR of 40.9% over 4 years with an average IF of 2.696 and a mean time to publication of 17.5 months, which is equivalent to that of similar scientific meetings. OPs have a higher PR in journals with greater IF values as compared with PPs.

#### MARKERS OF EARLY ATHEROSCLEROSIS, OXIDATIVE STRESS AND INFLAMMATION IN PATIENTS WITH ACROMEGALY.

<u>Ozkan C</u><sup>1</sup>, Altinova AE, Cerit ET, Yayla C, Sahinarslan A, Sahin D, Dincel AS, Toruner FB, Akturk M, Arslan M. *Pituitary. 2015 Oct; 18(5):621-9. doi: 10.1007/s11102-014-0621-6.* 

**Purpose:** Data regarding atherosclerosis in acromegaly is controversial in literature. We aimed to investigate the markers of early atherosclerosis, oxidative stress, inflammation and their relationships with each other in acromegaly.

**Methods:** Thirty-nine patients with acromegaly and 40 control subjects were enrolled. Patients were classified into two groups; active acromegaly (AA) and controlled acromegaly (CA). Controls were matched by age, gender, body mass index and presence of cardiovascular risk factors. Flow mediated dilatation (FMD), carotid intima media thickness (CIMT), epicardial adipose tissue thickness (EAT) were measured and serum levels of oxidative stress parameters, high mobility group box 1 protein (HMGB1) and high sensitive CRP (hs CRP) were evaluated.

**Results:** Significantly decreased FMD, increased CIMT and EAT were found in patients with acromegaly compared to controls (p < 0.01, p < 0.05, p < 0.001, respectively). EAT correlated negatively with FMD (r = -0.24, p = 0.038) and positively with

CIMT (r = 0.37, p < 0.01). Presence of acromegaly, hypertension and age were found to be the predictors of early atherosclerosis (p < 0.05). Hs CRP was decreased in AA compared to controls (p = 0.01). There were no significant differences for HMGB1 and oxidized LDL (ox-LDL) cholesterol levels and total antioxidant capacity (TAC) between AA, CA and controls (p >0.05).

**Conclusion:** Early atherosclerosis measured with FMD, CIMT and EAT may exist in acromegaly. However, decreased hs CRP and unchanged HMGB1, ox-LDL and TAC levels suggest that inflammation and oxidative stress do not seem to contribute to the development of atherosclerosis in these patients.

#### COMPARISON OF THERAPEUTIC CHARACTERISTICS OF ISLET CELL TRANSPLANTATION SIMULTANEOUS WITH PANCREATIC MESENCHYMAL STEM CELL TRANSPLANTATION IN RATS WITH TYPE 1 DIABETES MELLITUS.

**Unsal IO<sup>1</sup>, Ginis Z, Pinarli FA, Albayrak A, Cakal E, Sahin M, Delibasi T.** *Stem Cell Rev. 2015 Jun;11(3):526-32. doi: 10.1007/s12015-014-9563-7.* 

Although, pancreas islet call transplantation is a new, promising method for type 1 diabetic patients, it remains as an experimental procedure applied in selected patients. The present study aimed to investigate effect of pancreatic mesenchymal stem cell transplantation simultaneous with islet cell transplantation on islet liveliness and thus on the treatment of diabetes in type 1 diabetic rats. The study used Wistar Albino Rats and was performed in a total of four groups [control (G1), mesenchymal stem cell (G2), islet (G3) and islet + mesencymal stem cell (G4)] each including 8 rats. Blood glucose level of the rats, in which diabetes model has been created using streptozotocin, was measured after 72 h. Blood samples were obtained from the rats 30 days after transplantation and then, their livers and pancreases were kept in 10% formaldehyde and the experiment was ended. Following staining with H&E, they were morphologically evaluated under a light microscope. Change in mean blood glucose level was statistically significant in G3 and G4 versus G1 and G2 (p = 0.001, p < 0.001, p < 0.001, and p < 0.001 respectively). Histological examination revealed that mean number of islet cells in the pancreases of the rats was higher in G4; difference between the groups was statistically significant (p < 0.001). Transplantation of islet cells together with mesenchymal stem cells showed beneficial effects in terms of prolonging survival of islet grafts suggesting that transplantation of mesenchymal stem cells together with islet cells during clinical islet transplantation may be beneficial in increasing the number of noninsulin-dependent patients in Type 1 diabetes.

#### RELATIONSHIP BETWEEN GLYCEMIC CONTROL AND HISTOCHEMICAL MYELOPEROXIDASE ACTIVITY IN NEUTROPHILS IN PATIENTS WITH TYPE 2 DIABETES.

<u>Unubol M</u><sup>1</sup>, Yavasoglu I<sup>2</sup>, Kacar F<sup>3</sup>, Guney E<sup>1</sup>, Omurlu IK<sup>4</sup>, Ture M<sup>4</sup>, Kadikoylu G<sup>2</sup>, Bolaman Z<sup>2</sup>.

Diabetol Metab Syndr. 2015 Dec 30;7:119. doi: 10.1186/s13098-015-0115-3. eCollection 2015.

**Background:** Myeloperoxidase (MPO) is a lysosomal hemoprotein found in the azurophilic granules in neutrophils. Myeloperoxidase plays an important role in oxygen-dependent killing of bacteria, fungi, virus and malignant cells. Diabetes mellitus (DM) is listed among conditions that may lead to secondary MPO deficiency in neutrophils but inconsistent results concerning MPO activity in diabetic patients have been reported in the literature. In this study, we aimed to evaluate the relationship between glycemic control in patients with type 2 DM and MPO activity in neutrophils from a histochemical perspective.

**Methods:** The study included 40 patients with type 2 DM with poor glycemic control, 30 patients with type 2 DM with good glycemic control and 31 healthy controls. Peripheral blood smears were analyzed for each patient included in the study. Myeloperoxidase dye was used for staining. Myeloperoxidase ratios in neutrophil were evaluated for proportions of staining with MPO in 100 neutrophils in each smear. SPSS 16.0 version was used for statistical analyses.

**Results:** Myeloperoxidase ratios in neutrophils were 70 (58.5-80) in type 2 DM patients with poor glycemic control compared to 80 (73.75-90) in those with good glycemic control and 88 (78-92) in healthy controls. The DM group with poor glycemic control was statistically significantly different from the other groups (p < 0.001).

**Conclusions:** Poor glycemic control in diabetic patients results in decreased MPO activity in neutrophils histochemically.

#### IMPROVING PANCREATIC ISLET IN VITRO FUNCTIONALITY AND TRANSPLANTATION EFFICIENCY BY USING HEPARIN MIMETIC PEPTIDE NANOFIBER GELS.

**Uzunalli G<sup>1</sup>, Tumtas Y<sup>1</sup>, Delibasi T<sup>2</sup>, Yasa O<sup>1</sup>, Mercan S<sup>3</sup>, Guler MO<sup>4</sup>, Tekinay AB<sup>5</sup>.** *Acta Biomater. 2015 Aug;22:8-18. doi: 10.1016/j.actbio.2015.04.032. Epub 2015 Apr 27.* 

Pancreatic islet transplantation is a promising treatment for type 1 diabetes. However, viability and functionality of the islets after transplantation are limited due to loss of integrity and destruction of blood vessel networks. Thus, it is important to provide a proper mechanically and biologically supportive environment for enhancing both in vitro islet culture and transplantation efficiency. Here, we demonstrate that heparin mimetic peptide amphiphile (HM-PA) nanofibrous network is a promising platform for these purposes. The islets cultured with peptide nanofiber gel containing growth factors exhibited a similar glucose stimulation index as that of the freshly isolated islets even after 7 days. After transplantation of islets to STZ-induced diabetic rats, 28 daylong monitoring displayed that islets that were transplanted in HM-PA nanofiber gels maintained better blood glucose levels at normal levels compared to the only islet transplantation group. In addition, intraperitoneal glucose tolerance test revealed that animals that were transplanted with islets within peptide gels showed a similar pattern with the healthy control group. Histological assessment showed that islets transplanted within peptide nanofiber gels demonstrated better islet integrity due to increased blood vessel density. This work demonstrates that using the HM-PA nanofiber gel platform enhances the islets function and islet transplantation efficiency both in vitro and in vivo.

#### VOICE CHARACTERISTICS ASSOCIATED WITH POLYCYSTIC OVARY SYNDROME.

<u>Aydin K<sup>1</sup>, Akbulut S<sup>2</sup>, Demir MG<sup>3</sup>, Demir S<sup>4</sup>, Ozderya A<sup>1</sup>, Temizkan S<sup>1</sup>, Sargin M<sup>4</sup>.</u> Laryngoscope. 2015 Dec 23. doi: 10.1002/lary.25818. [Epub ahead of print]

**Objectives/hypothesis:** To test the assumption that voice is changed in polycystic ovary syndrome (PCOS) and identify changes that occur.

Study design: Cross-sectional pilot study.

**Methods:** Thirty patients with PCOS and a control group of 22 age-matched and body mass index-matched healthy women were included. Demographic data, anthropometric measurement, serum androgens, and Voice Handicap Index-10 were determined. Transnasal fiberoptic laryngoscopy and rigid stroboscopy were performed. Supraglottic hyperfunction was assessed during fiberoptic laryngoscopy. Presence of supraglottic hyperfunction was interpreted as abnormal muscle tension pattern. Glottal closure configuration and vibratory wave characteristics were evaluated via stroboscopy. Acoustic analysis was performed with the Dr. Speech software program version 4 (Tiger DRS Inc., Seattle, WA).

**Results:** Voice complaints and acoustic parameters were similar between groups, whereas serum androgens were significantly higher in patients (P < 0.001). Laryngeal examination detected pathology in 17 (56.7%) patients and two (9.1%) controls (P < 0.001). Fiberoptic examination determined supraglottic hyperfunction in 11 patients but in only two controls (P = 0.023). In stroboscopy, incomplete glottal closure configuration and impaired vocal fold vibration were present in 10 and 11 patients, respectively, whereas only one control had glottal closure abnormality and none of the controls had abnormal vibration (P = 0.028 and P = 0.001, respectively).

**Conclusion:** Abnormal muscle tension patterns and impaired vocal fold vibration are frequent among patients with PCOS; but they are not accompanied by increased vocal symptoms or deteriorated acoustic voice parameters. This may be important for professional voice users or in extensive or extraordinary voice use demands in patients with PCOS.

#### Yeni Profesörlerimiz

Prof. Dr. Ayşegül Atmaca

Prof. Dr. Kevser Onbaşı

Tebrik eder, başarılarının devamını dileriz.

#### Yeni Üyelerimiz

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Üyelerimizi tebrik eder, başarılar dileriz.

#### Duyurular



#### Değerli Meslektaşlarım,

ürkiye Endokrinoloji ve Metabolizma Derneği olarak kuruluşumuzdan bu yana, yapmış olduğumuz çalışmalarımızda ve dernekçe düzenlediğimiz tüm faaliyetlerimizde, meslektaşlarımıza yararlı olduğumuz düşüncesiyle hareket etmekteyiz. Yoğun iş temposu içinde bulunan siz değerli meslektaşlarımız için, Diabetes Mellitus gibi ülkemizde ve Dünyada sıklığı giderek artan, yol açtığı, morbiditeler ve mortaliteler göz önüne alındığında hemen hemen tıbbın bütün disiplinlerini ilgilendiren bir hastalıkla ilgili, kanıta dayalı son bilimsel çalışmaları içeren, ülkemiz koşullarına da uygun olacak Tanı, Takip ve Tedavi ile ilgili güncel öneriler paketi sunan temel bir başucu kitabına olan gereksinim aşikardır. Bu amaçla Türkiye Endokrinoloji ve Metabolizma Derneği olarak Diyabet Çalışma grubu üyelerimizin çok büyük bir özveri ile hazırladıkları "Geçmişten Geleceğe Diabetes Mellitus" isimli kitabımızı Türk Tıbbının hizmetine sunmaktan dolayı büyük bir mutluluk duymaktayız. Bu kitap bütünüyle derneğimiz tarafından, hazırlanmış ve yayınlanmıştır. Gıda, diyagnostik ve ilaç endüstrisi gibi başka bir kaynaktan destek alınmadığından bir çıkar çatışması bulunmamaktadır. Tüm meslektaşlarımıza yararlı olması dileği ile bu kitap projesini gerçekleştiren başta Editör Prof. Dr. Şazi İmamoğlu hocamız olmak üzere Yardımcı Editörler Prof. Dr. İlhan Satman, Prof. Dr. Sema Akalın, Prof. Dr. Candeğer Yılmaz, Doç. Dr. Serpil Salman hocalarımıza ve kitabın hazırlanmasına katkıda bulunan tüm üyelerimize TEMD yönetim Kurulu olarak şükranlarımızı sunarız.

**Prof. Dr. Mustafa Sait Gönen** *TEMD Başkanı* 

#### Duyurular

#### Değerli Meslektaşlarım,

Türkiye Endokrinoloji ve Metabolizma Derneği Diyabet Çalışma Grubu'nun organizasyonu ve dernek yönetim kurulunun uygun kararı ile hazırladığımız *"Geçmişten Geleceğe Diabetes Mellitus"* isimli kitabımızın ilk baskısını sunmanın heyecanını sizlerle paylaşmak istiyoruz.

Türkiye'de ve Dünya'da sıklığı giderek artan diyabet, tıbbın üzerinde en çok araştırma yaptığı ve her gün yeni bilgilere ulaştığı alanlarından birisi olmaya devam etmektedir.

Türkiye Endokrinoloji ve Metabolizma Derneği Diyabet Çalışma Grubu'nda meslektaşlarımız ile yaptığımız toplantılarda Türkiye'de önemli ve böylesine güncel olan diyabet hakkında yeni bilgileri içeren bir kitabın gerekli olduğu konusundan hareketle kitabımızı hazırlamaya karar verildi. *"Geçmişten Geleceğe Diabetes Mellitus"* kitabımızı oluşturma teklifimizi memnuniyetle kabul eden ve bu konuda bize destek veren meslektaşlarımıza teşekkür ediyoruz.

Kitabımızın en güzel ve özel tarafı, yazar kadromuzun Türkiye Endokrinoloji ve Metabolizma Derneği'nin değerli üyeleri tarafından oluşturulmuş olmasıdır. Meslektaşlarımız yoğun görevleri arasında özverili çalışmaları ile yurdumuzun dört bir tarafından güncel bilgileri en ideal şekilde derleyip bilgi ve deneyimlerini kitabımıza aktararak kitabımızın hayat bulmasını sağlamışlardır.

Kitabımızda, diabetes mellitus alanında tarihçe, fizyopatolojik mekanizmalar, tanı, tedavi, izlem parametre ve kriterler ile yeni gelişmekte olan bilgi ve deneyimleri sizlere kolay anlaşılabilir, en açık ve en sade bir anlatımla sunmayı amaçladık.

Kitabımızda diabetes mellitusla ilgili konular farklı bölümler halinde sunulmakta olup her bir bölüm farklı meslektaşlarımız tarafından kaleme alınmış ve bu metodla farklı bilgi ve deneyimlerin bir arada yoğurularak bilgi zenginliği yaratılmak istenmiştir.

Yazarlarımız tarafından gönderilen yazılar çok değerli editörlerimizin özverili çalışmaları ile basım aşamasına getirilmiştir. Editörlük görevini yüklenen, özveri ile yerine getirerek, gerekli inceleme ve düzeltmeleri yapan değerli meslektaşlarımın kitabımızın hayat bulmasında çok önemli ve büyük katkıları olmuştur. Kendilerine burada teşekkür etmek isterim.



Bizlere bu projenin birer parçası olma şansı veren Türkiye Endokrinoloji ve Metabolizma Derneği Yönetim Kurulu üyelerine ve Diyabet Çalışma Grubu üyelerine, tüm editör ve yazar meslektaşlarım adına teşekkür etmeyi borç bilirim.

Bu kitabın tamamlanmasında yoğun emekleri geçen ve sorumluluk üstlenen değerli meslektaşlarıma teşekkür ederim.

Diyabet biliminde uzman olan bir gurubun hazırladığı bu kitabın ülkemizin önemli bir eksiğini tamamlayacağına inanıyoruz. Kitabımızın bu ilk basımı ile ilgili görüşlerinizin daha sonraki basımlarda büyük katkılar sağlayacağı düşüncesi ile kitabımızı siz değerli meslektaşlarımızın hizmetine sunuyoruz.

Editör ve Yazarlar Adına Prof. Dr. Şazi İmamoğlu

#### Türkiye Endokrinoloji ve Metabolizma Derneği Bülteni

Türkiye Endokrinoloji ve Metabolizma Derneği'nce üç ayda bir yayımlanır.

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Baskı tarihi: Ağustos 2016

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