TÜRKİYE ENDOKRİNOLOJİ VE METABOLİZMA DERNEĞİ BÜLTENİ

Üç ayda bir yayımlanır • Üyelere ücretsiz olarak gönderilir

Sayı 44 • Ekim - Kasım - Aralık 2013

İstanbul Üniversitesi Tıp Fakültesi Öğretim Üyesi ve dergimizin desk editörlerinden değerli hocamız *Prof. Dr. Neşe Çolak*'ı kaybettik. Hocamıza Allah'tan rahmet, tüm endokrinoloji camiasına başsağlığı dileriz.

"Bâki kalan bu kubbede hoş bir sadâ imiş"

Prof. Dr. Neşe Çolak
31 Aralık 1965 tarihinde Trabzon'da doğdu. İlk ve orta öğrenimimi Bozcaada-Çanakkale'de tamamladı. Lise öğrenimime İstanbul Burhan Felek Lisesi'nde devam etti. 1982 yılında aynı liseden birincilikle mezun oldu. Aynı yıl İstanbul Tıp Fakültesi'ne başlama hakkını elde etti. 1988 yılında İstanbul Tıp Fakültesi'nden dönem birincisi olarak mezun oldu. Aynı yıl İstanbul Tıp Fakültesi İç Hastalıkları Anabilim Dalı'nda uzmanlık eğitimine başladı. 1993 yılı Mart ayında *"Akut Miyokard İnfarktüsünün Erken ve Geç Döneminde Signal Ortalamalı EKG'nin Önemi: Prospektif Bir Çalışma"* başlıklı tezi ile *"İç Hastalıkları Uzmanı"* ünvanını aldı. 1993 yılı Nisan ayında İstanbul Tıp Fakültesi İç Hastalıkları Anabilim Dalı, Endokrinoloji ve Metabolizma Bilim Dalı'nda yan dal uzmanlık eğitimine başladı. 31 Ocak 1996 tarihinde *"Farklılaşmış Tiroid Karsinomlarının Takibinde Tiroglobülin Ölçümlerinin Rolünün Değerlendirilmesi"* başlıklı teziyle *"Endokrinoloji ve Metabolizma Yan Dal Uzmanı"* ünvanını aldı. 20 Kasım 1997 tarihinde girmiş olduğu doçentlik sınavı sonucunda İç Hastalıkları Anabilim Dalı'nda *"Üniversite Doçenti"* ünvanına, 31 Temmuz 2003 tarihinde *"Profesör"* ünvanına hak kazandı.

TEMD ADRENAL VE GONADAL HASTALIKLAR ÇALIŞMA GRUBU 2013 BÖLGE TOPLANTISI

Türkiye Endokrinoloji ve Metabolizma Derneği, Adrenal ve Gonadal Hastalıklar Çalışma Grubu Bölge Toplantısı, 1 Aralık 2013'de Mersin Hilton Otelinde Mersin Üniversitesi Tıp Fakültesi Endokrinoloji ve Metabolizma Hastalıkları Bilim Dalının ev sahipliğinde yapıldı. Çalışma grubu ve bölge üniversiteleri öğretim üyelerinin katkıları ve bölge endokrinoloji, iç hastalıkları uzmanları, adrenal ile ilgilenen cerrahların katılımı ile başarılı bir şekilde gerçekleşen toplantıda adrenal hastalıklar ve olgular beş ayrı oturumda tartışıldı.

Mersin toplantısından görünümler.

TİROİD ÇALIŞMA GRUBU TOPLANTILARI

Trabzon toplantısından bir görünüm.

Antalya toplantısından bir görünüm.

Kocaeli toplantısından bir görünüm.

Türkiye Endokrinoloji ve Metabolizma Derneği, Tiroid Çalışma grubunun düzenlediği *"Tiroid Hastalıkları Kurs"*ları **5 Ekim 2013** tarihinde Kocaeli'nde, (67 kişi) **2 Kasım 2013** tarihinde Trabzon'da, (50 Kişi) **21 Aralık 2013** tarihinde Antalya'da (120 kişi) düzenlenmiştir. Kurslarımıza özellikle iç hastalıkları ve aile hekimleri tarafından oldukça ilgi gösterilmiş meslektaşımızın katılımı ile başarılı bir şekilde gerçekleştirilmiştir.

KONGRE VE KURSLARIMIZ

Bilimsel Kongreler ve Uluslararası Sempozyumlar

Ayrıntılara ve 2013 yılına ait Bilimsel Toplantı Takvimine derneğimiz internet sayfasından (www.temd.org.tr) ulaşabilirsiniz.

01-02 Şubat 2014
International Clinical Update in Endocrinology
Hyderabad, India
www.icuendo.org

05-07 Şubat 2014
23rd IOF Advanced Training Course on Osteoporosis
Geneva, Switzerland
http://www.iofbonehealth.org/advanced-training

24 -27 Mart 2014
Society for Endocrinology BES 2014
The ACC, Liverpool, UK
http://www.endocrinology.org

02-05 Nisan 2014
IOF - ESCEO World Congress on Osteoporosis, Sevile, Spain
http://www.wco-iof-esceo.org

10-12 Nisan 2014
14th ESE Postgraduate Training Course in Clinical Endocrinology
Vilnius, Lithuania
http://www.ese-hormones.org

23-27 Nisan 2014
50. Ulusal Diyabet Kogresi, Rixos Sungate Hotel, Beldibi - Antalya
http://www.diyabetkongresi2014.org/

03-07 Mayıs 2014
16th European Congress of Endocrinology (ECE2014)
Wroclaw, Poland
http://www.ece2014.org/

21-25 Mayıs 2014
36. Türkiye Endokrinoloji ve Metabolizma Hastalıkları Kongresi
Cornelia Diamond Hotel, Antalya
http://www.temhk2014.org/

14 - 18 Mayıs 2014
AACE 23rd Annual Scientific and Clinical Congress
Las Vegas, NV,USA
http://am.aace.com

28 - 31 Mayıs 2014
21st European Congress on Obesity, Sofia, Bulgaria
http://eco2014.easo.org/

▶

13 - 17 Haziran 2014
American Diabetes Association 74th Scientific Sessions
San Francisco, CA, USA
http://professional.diabetes.org

21-24 Haziran 2014
ICE/ENDO 2014, Chicago, Illinois
https://www.endocrine.org/endo-2014

06 - 10 Eylül 2014
38th Annual Meeting of the European Thyroid Association
Santiago de Compostela, Spain
http://www.eurothyroid.com/futureevents.html

10 - 13 Eylül 2014
16th Congress of the European Neuroendocrine Association
Sofia, Bulgaria
http://www.eneassoc.org/

23-26 Ekim 2014
EndoBridge 2014, Antalya

15-19 Eylül 2014
50th EASD Annual Meeting, Vienna, Austria
www.easd.org

29 Ekim - 02 Kasım 2014
84th Annual Meeting of the American Thyroid Association
Coronado, CA,USA
http://www.thyroid.org

ÜYELERİMİZDEN LİTERATÜR SEÇMELERİ

Evaluation of depression, quality of life and body image in patients with Cushing's disease.

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Pituitary. 2013 Sep;16(3):333-40. doi:10.1007/s11102-012-0425-5.

Abstract

The aim of this study was to evaluate patients with Cushing's disease (CD) who had undergone transsphenoidal surgery in terms of depression, quality of life (QoL), and perception of body image in comparison to healthy controls. Forty patients with CD and 40 healthy controls matched for demographic characteristics were included in the study. The subjects were evaluated with the Beck depression inventory (BDI), the health survey-short form (SF-36) and the multidimensional body-self relations questionnaire (MBSRQ). Subgroups of the patients with CD were formed on the basis of remission status and BDI scores. In this study, QoL in the general health category and body image were lower in the patients with CD than in the healthy subjects. However, no differences in depression scores were found between the two groups. When the CD group was evaluated according to remission rate, the mean BDI score was significantly higher in the CD patients without remission than in both the CD patients with remission and the healthy subjects ($p = 0.04$). However, the physical functioning, bodily pain and general health scores of the CD patients without remission on the SF-36 questionnaire were lower than in the CD patients in remission and the healthy subjects ($p = 0.002$, $p = 0.04$, $p = 0.002$, respectively). Fitness evaluation, health evaluation and body areas satisfaction scores of the MBSRQ were significantly different in the three groups ($p = 0.003$, $p = 0.009$ and $p = 0.001$, respectively). In this study, patients with CD were found to have lower QoL, lower body image perception and higher levels of depression compared to healthy controls, particularly if the disease is persistant despite surgery.

Aromatase cytochrome P450 enzyme expression in prolactinomas and its relationship to tumor behavior.

Akinci H, Kapucu A, Dar KA, Celik O, Tutunculer B, Sirin G, Oz B, Gazioglu N, Ince H, Aliustaoglu S, Kadioglu P.
Division of Endocrinology and Metabolism, Department of Internal Medicine, Cerrahpasa Medical School, Istanbul University, Istanbul, Turkey.

Pituitary. 2013 Sep;16(3):386-92. doi: 10.1007/s11102-012-0436-2.

Abstract

The aim of the study was to evaluate the presence of aromatase cytochrome P450 enzyme (P450AROM) expression in normal pituitary tissues and tumor tissues of patients with prolactinoma and to examine the impact of the P450AROM expression on clinical outcome. Twenty-six consecutive human pituitary tissue samples were obtained from autopsies performed at the Institute of Forensic Medicine. Sixty-four patients who had an adenomectomy between 2000 and 2009 after prolactinoma diagnosis with histologically confirmed pituitary tumor tissues were retrospectively included in this study. The slices from the pituitary tissues were subjected to immunohistochemical staining for evaluation of P450AROM and estrogen receptor beta (ER beta) subunit. Immunohistochemistry results were compared according to age, gender, remission rate, resistance and invasion status of the patients. Higher than normal P450AROM expression was found in the pituitary tissues of the patients with prolactinoma ($p < 0.001$). P450AROM intensity had no relation to resistance or remission in patients with prolactinoma ($p = 0.44$, $p = 0.45$, respectively). The subgroup analysis showed that compared to males without invasive adenoma, males with invasive adenoma had higher P450AROM expression ($p = 0.048$). ER beta was found to have an impact on resistance ($p = 0.049$). This study shows that P450AROM expression is present in the pituitary tissues of patients with prolactinoma and that this presence could be important in development and tumor behavior of prolactinomas.

Does hormonal control obviate positive airway pressure therapy in acromegaly with sleep-disordered breathing?

Akkoyunlu ME, Ilhan MM, Bayram M, Taşan E, Yakar F, Ozçelik HK, Karakose F, Kart L.
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Respir Med. 2013 Nov;107(11):1803-9. doi: 10.1016/j.rmed.2013.08.043. Epub 2013 Sep 11.

Abstract

Introduction: Acromegaly is a disease in which uncontrolled release of growth hormone occurs after closure of epiphyseal plates, causing changes in the body that can lead to sleep disordered breathing (SDB). No definite guidelines regarding the treatment of SDB in acromegaly are available. In this study, we aimed to investigate the prevalence of SDB in acromegaly and whether hormonal control alters the necessity of positive airway pressure (PAP) therapy in acromegaly patients with SDB.

Methods: Forty-two acromegaly patients were included in the study and divided into two groups according to disease status, i.e., active or well controlled. All patients underwent polysomnography. Fourteen patients with active acromegaly were diagnosed with SDB and were evaluated for PAP therapy with polysomnography both before and 6 months after disease control was achieved.

Results: Sleep-disorder breathing was diagnosed in 22 of 42 patients, 7 of 20 patients with controlled-disease and 15 of 20 patients with active diseases. There were significant reductions in respiratory disturbance index (RDI), apnea index, desaturation index, central apnea number, and rapid eye movement-phase RDI at the control polysomnography. Initially, PAP therapy was indicated in 12 of 14 patients and PAP therapy indication held in 11 patients after acromegaly control was achieved.

Conclusion: Our study revealed that over half of patients with acromegaly had SDB. Furthermore, SDB severity decreases with acromegaly treatment; however, this decrease does not change the indication for PAP therapy; therefore, PAP therapy should not be delayed in acromegalic SDB patients.

Basal and meal-stimulated ghrelin, PYY, CCK levels and satiety in lean women with polycystic ovary syndrome: effect of low-dose oral contraceptive.

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Hacettepe University School of Medicine, Department of Internal Medicine, Division of Endocrinology and Metabolism, Ankara.

J Clin Endocrinol Metab. 2013 Nov;98(11):4475-82. doi: 10.1210/jc.2013- 1526. Epub 2013 Sep 3.

Abstract

Context: Ghrelin is an orexigenic peptide that stimulates food intake, whereas peptide YY (PYY) and cholecystokinin (CCK) are anorexigenic gut hormones. Patients with polycystic ovary syndrome (PCOS) appear to have alterations in appetite regulation.

Objective: We aimed to determine whether fasting or meal-stimulated ghrelin, PYY, CCK, and satiety responses are different between lean PCOS patients and healthy women. We also aimed to assess the potential effect of oral contraceptive use on these hormones and satiety response.

Design And Setting: We conducted a prospective observational study in a university practice.

Patients: Eighteen lean PCOS patients and 18 healthy control women matched for age and body mass index underwent measurements of circulating ghrelin, PYY, CCK, and satiety index (SI) before and after a standardized mixed meal at 0, 15, 30, 45, 60, 90, 120, and 180 minutes.

Interventions: For PCOS patients who were treated with ethinyl estradiol 30 µg/drospirenone 3 mg for 3 months, measurements were repeated.

Main Outcome: We measured ghrelin, PYY, and CCK levels and SI.

Results: At baseline, fasting ghrelin, PYY, CCK, and SI values in PCOS patients were not different from controls. Meal-stimulated PYY, CCK, and SI were also not different between the groups, whereas PCOS patients had significantly lower meal-stimulated ghrelin levels compared to controls (P = .04). Ghrelin, PYY, CCK, and SI did not show a significant change after treatment with ethinyl estradiol/drospirenone for 3 months.

Conclusions: Basal and stimulated hunger and satiety hormones in lean PCOS patients are not different from lean healthy women, except for a lower meal-stimulated ghrelin response. Short-term use of a low-dose oral contraceptive does not have an effect on appetite regulation of PCOS.

Decrease in TSH levels after lactose restriction in Hashimoto's thyroiditis patients with lactose intolerance.

Asik M, Gunes F, Binnetoglu E, Eroglu M, Bozkurt N, Sen H, Akbal E, Bakar C, Beyazit Y, Ukinc K.

Department of Endocrinology and Metabolism, Faculty of Medicine, Çanakkale Onsekiz Mart University, Çanakkale, Turkey,

Endocrine. 2013 Sep 28. [Epub ahead of print]

Abstract

We aimed to evaluate the prevalence of lactose intolerance (LI) in patients with Hashimoto's thyroiditis (HT) and the effects of lactose restriction on thyroid function in these patients. Eighty-three HT patients taking L-thyroxine (LT4) were enrolled, and lactose tolerance tests were performed on all patients. Lactose intolerance was diagnosed in 75.9 % of the patients with HT. Thirty-eight patients with LI were started on a lactose-restricted diet for 8 weeks. Thirty-eight patients with LI (30 euthyroid and 8 with subclinical hypothyroidism), and 12 patients without LI were included in the final analysis. The level of TSH significantly decreased in the euthyroid and subclinical hypothyroid patients with LI [from 2.06 ± 1.02 to 1.51 ± 1.1 IU/mL and from 5.45 ± 0.74 to 2.25 ± 1.88 IU/mL, respectively (both P < 0.05)]. However, the level of TSH in patients without LI did not change significantly over the 8 weeks (P > 0.05). Lactose intolerance occurs at a high frequency in HT patients. Lactose restriction leads to decreased levels of TSH, and LI should be considered in hypothyroid patients who require increasing LT4 doses, have irregular TSH levels and are resistant to LT4 treatment.

Lymphocyte subpopulations in Sheehan's syndrome.

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Pituitary. 2013 Jun;16(2):202-7. doi: 10.1007/s11102-012-0405-9.

Abstract

The role of autoimmunity in the development of Sheehan's syndrome is obscure. There are a limited number of studies investigating the immunological alterations accompanying Sheehan's Syndrome. Our objective was to evaluate lymphocyte subsets in these patients. We conducted a cross-sectional clinical study. Cytofluorometry was used for the immunophenotyping of peripheral blood leukocytes from patients with Sheehan's syndrome followed up in the endocrine clinic during 2005-2009. Fifteen consecutive patients (mean age 61.6 ± 11.3, range 34-75 years) and 25 healthy controls (mean age 56.7 ± 10.6, range 34-80 years) were included. There was no statistically significant difference between the groups in terms of mean age. The percentages of CD19(+), CD16(+)/56(+), CD8(+)28(-), γδTCR(+), CD8(+); the total lymphocyte counts; and the ratio of CD8(+)28(-)/CD8(+)28(+) were similar (p > 0.05) between patients and controls. Whereas the leucocyte counts (p = 0.003), the percentage of CD3 (+) DR (+) (p < 0.001), CD8(+)28(+) (p = 0.030), CD4(+)CD25(+) (p = 0.007), the ratio of CD3 (+) DR(+)/CD3 (p < 0.001) were higher; the percentage of CD3 (p = 0.020), CD4 (p < 0.001) and the ratio of CD4/CD8 (p = 0.006) were lower in patients with Sheehan's syndrome compared to healthy controls. There was a positive correlation between the duration of illness and the percentage of CD3(+)DR(+) (r = 0.53, p = 0.03) expression. Some peripheral lymphocyte cell subsets show marked variation in patients with Sheehan's syndrome in comparison to matched healthy subjects, which may have implications for altered immune regulation in these patients. High CD3 (+) DR (+) expression that correlates with the duration of illness in Sheehan's patients is suggestive of an ongoing inflammation accompanying the slow progression of pituitary dysfunction in Sheehan's syndrome. It is not clear if these cellular alterations contribute to the cause or consequence of pituitary deficiency in Sheehan's syndrome.

Effects of three different medications on metabolic parameters and testicular volume in patients with hypogonadotropic hypogonadism: 3-year experience.

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Clin Endocrinol (Oxf). 2013 Aug;79(2):243-51. doi: 10.1111/cen.12135. Epub 2013 May 6.

Abstract

Introduction: The aim of this study was to demonstrate the influences of three different treatment strategies on biochemical parameters and testicular volume (TV) in patients with idiopathic hypogonadotropic hypogonadism (IHH).

Subjects Design and Methods: Seventy-seven never-treated patients with IHH and age and body mass index (BMI)-matched 42 healthy controls were analysed in a retrospective design. Twenty-eight patients were treated with testosterone esters (TE), 25 patients were treated with human chorionic gonadotropin (hCG) and 24 patients were treated with testosterone gel (TG). Biochemical parameters, tanner stages (TS) and TV were evaluated before and after 6 months of treatment.

Results: Pretreatment TV, TS and biochemical test results were similar among the three treatment subgroup. In the TE-treated group, BMI, haemoglobin, haematocrit, creatinine, triglyceride, total testosterone (TT), TS and TV increased, but HDL-cholesterol (C) and urea level decreased significantly. In the hCG-treated group, triglyceride level decreased, and luteinizing hormone level, TS and TV increased significantly. BMI, TT, TS and TV increased, and leucocyte count, total-C, HDL-C levels decreased significantly in the TG-treated patients. No treatment type resulted in any changes in insulin resistance markers.

Conclusion: hCG treatment resulted in favourable effects particularly on TV and lipid parameters. When TV improvement is considered less important, TG treatment may be a better option for older patients with IHH because of its easy use, neutral effects on triglyceride, haemoglobin and haematocrit, and its beneficial effects on total cholesterol level.

Impact of early versus late enteral nutrition on cell mediated immunity and its relationship with glucagon like peptide-1 in intensive care unit patients: a prospective study.

Bakiner O, Bozkirli E, Giray S, Arlier Z, Kozanoglu I, Sezgin N, Sariturk C, Ertorer E.

Baskent University, Faculty of Medicine, Department of Endocrinology and Metabolism Diseases, Ankara, Turkey.

Crit Care. 2013 Jun 20;17(3):R123. [Epub ahead of print]

Abstract

Introduction: Glucagon-like peptide-1 (GLP-1) originates from the gastrointestinal system in response to the presence of nutrition in the intestinal lumen and potentiates postprandial insulin secretion. Also, it acts as an immune-modulator which has influences on cell-mediated immunity.The aim of this study was to determine the impact of early enteral nutrition versus late enteral nutrition on plasma GLP-1 levels and the relationship between GLP-1 changes and cell-mediated immunity.

Materials and Methods: The study was designed as a prospective, single-blinded study and carried out in the neurology intensive care unit (ICU) of a university hospital. Twenty-four naive patients with acute thromboembolic cerebrovascular events, with National Institute of Health (NIH) stroke scores between 12 and 16, were included. Any condition interfering with GLP-1 and immunity was regarded as exclusion criterion. Two patients died, and two dropped out of the study due to complicating conditions.Patients were randomly subjected to early enteral feeding within the first 24 hours (Group 1), or late enteral feeding, beginning 48 hours after admission (Group 2) via a nasogastric tube. Calculated daily energy requirement was supplemented with parenteral nutrition, starting on the first study day for both groups. Blood samples were obtained before, and at 5, 15, 30, 60 and 120 minutes after the first enteral feeding for GLP-1 assays; this procedure was repeated on the third day. Before and 24 hours after the first enteral feeding, samples were also taken for immunological analysis. Clinical observations were recorded.Pre- and post-feeding plasma GLP-1 changes between the two groups and within groups were evaluated. Lymphocyte subgroup changes before and 24 hours after the first enteral feeding in relation to GLP-1 changes were sought as well.

Results: Group 1 and Group 2 exhibited similar GLP-1 levels in the pre-feeding and post-feeding periods for both the first time and the third day of enteral feeding. Also, no significant change in pre-/post-feeding GLP-1 levels was observed within groups. T-helper and T-regulatory cells increased, T-cytotoxic cells decreased significantly in Group 1 (P = 0.02; P = 0.036; P = 0.0019), but remained the same in Group 2 after enteral feeding. Positive but statistically insignificant clinical effects in terms of predisposition to infections (10% vs 40%) and median time of ICU stay (10 vs 15 days) were observed in Group 1.

Conclusions: Depending on our findings, we propose that early enteral feeding may cause amelioration in cell-mediated immunity via factors other than GLP-1 in ICU patients with acute thromboembolic stroke. However, the possible deleterious effects of parenteral nutrition cannot be ruled out.

HDL cholesterol subfractions and the effect of testosterone replacement in hypogonadism.

Bolu E, Sonmez A, Tapan S, Taslipinar A, Aydogdu A, Meric C, Basaran Y, Uckaya G, Serdar M, Kurt I, Azal O.
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Horm Metab Res. 2013 Jun;45(6):443-8. doi: 10.1055/s-0033-1343447. Epub 2013 Apr 23.

Abstract
Metabolic disorders and cardiovascular events are increased in hypogonadism. Serum HDL composition is a better cardiovascular predictor than the HDL counts. However, there is no information about the HDL subfractions in patients with hypogonadism. We designed a prospective study to investigate the HDL subfractions in treatment naïve subjects with hypogonadism and the effects of 2 different testosterone replacement regimens on the HDL subfractions. Seventy young male patients with congenital hypogonadotropic hypogonadism (CHH) and 70 age and BMI-matched healthy males were enrolled in the present study. The patients were assigned to receive intramuscular injections of testosterone esters 250 mg every 3 weeks and transdermal testosterone applications 50 mg daily. Biochemical investigations including HDL subfractions and insulin resistance were done. Patients with CHH had higher levels of insulin, HOMA-IR, WC, triglyceride, and diastolic blood pressure. Although, the HDL cholesterol concentrations were similar in both groups, hypogonadal patients had lower HDL2 and higher HDL3 levels. The total testosterone levels were independent determinants of the HDL2 subfractions. During the follow-up, a significant increase in the BMI and WC values and a significant decrease in the levels of total cholesterol, HDL cholesterol, and HDL3 were observed. No difference was present between the 2 treatment arms. These results show that patients with hypogonadism have unfavorable HDL compositions in addition to the other dysmetabolic features. However, testosterone replacement for about six months neither improves the metabolic problems nor the HDL composition. Mechanistic studies are warranted to better understand the cardiovascular effects of unfavorable HDL compositions in hypogonadism.

Effects of L-thyroxine on gastric motility and ghrelin in subclinical hypothyroidism: a prospective study.

Canpolat AG, Kav T, Sivri B, Yildiz BO.
Hacettepe University Faculty of Medicine, Department of Internal Medicine, Division of Endocrinology and Metabolism, Ankara, Turkey.
J Clin Endocrinol Metab. 2013 Nov;98(11):E1775-9. doi: 10.1210/jc.2013-1488. Epub 2013 Sep 5.

Abstract
Introduction: Overt hypothyroidism affects the gastrointestinal system. Limited data are available regarding gastric motility in subclinical hypothyroidism (SCH).
Objective: The aim of this study was to assess gastric motility-related gastric symptoms and levels of ghrelin in patients with SCH compared with those in healthy control subjects and to evaluate the potential effects of l-thyroxine replacement therapy.
Methods: Twenty premenopausal women with SCH and 20 age- and body mass index-matched healthy control women were enrolled in the study. The gastroparesis cardinal severity index questionnaire was used to reveal gastrointestinal motility changes, and electrogastrographic activities were measured. Fasting and postprandial ghrelin levels at 30, 60, and 120 minutes were determined during a mixed meal test. All tests were repeated after 6 months when patients were in the euthyroid state.
Results: The gastroparesis cardinal severity index score, fasting tachygastria ratio, and postprandial/fasting bradygastria ratio in electrogastrography were higher in patients with SCH compared with control subjects ($P = .03$, $P = .04$, and $P = .04$, respectively). All 3 parameters significantly improved after l-thyroxine replacement therapy ($P < .001$, $P = .005$, and $P = .02$ respectively) reaching levels similar to those of control subjects. Baseline and area under the curve for ghrelin during mixed meal tests did not show a difference between patients with SCH and control subjects and before and after l-thyroxine replacement in SCH.
Conclusion: Gastric dysmotility and the resultant upper gastrointestinal symptoms can be observed in SCH, and symptomatology related to dysmotility and parameters appear to be improved with thyroid hormone replacement. Our results also suggest that ghrelin levels in response to a meal are similar between women with SCH and healthy women and that normalization of thyroid function by l-thyroxine does not modulate these levels.

Nutraceuticals for Metabolic Syndrome Management: from Laboratory to Benchside.

Cicero AF, Tartagni E, Ertek S.
Sant'Orsola-Malpighi University Hospital Padiglione, Bologna, Italy.
Curr Vasc Pharmacol. 2013 Apr 25. [Epub ahead of print]

Abstract
Metabolic syndrome (MetS) is a world-wide epidemic disease associated with increased morbidity and mortality. Treatment strategies include pharmacologic and non-pharmacologic methods, with varying degrees of success rate all over the world. Pharmaceutical interest in this field is growing, together with patients requests' for supplementary (or "alternative") treatments. The knowledge of nutraceuticals beneficial effects in subjects with the MetS could help us to better define the appropriate treatment for these subjects, in particular those with contraindications for commonly used drugs, or to achieve guidelines suggested targets. On the other side, it could be not convenient to use a nutraceutical to treat each metabolic syndrome component (i.e.: from 3 to 5) in each affected subjects. Thus, this review tries to focus on widely marketed nutraceuticals with clinically demonstrated effects on more than one component of the MetS, namely omega-3 fatty acids, berberine, psyllium and other soluble fibers, cinnamon, chromium picolinate, banaba, and bitter gourd.

Increased thyroid cancer risk in acromegaly.

Dagdelen S, Cinar N, Erbas T.
Department of Endocrinology and Metabolism, School of Medicine, Hacettepe University, Ankara, Turkey.
Pituitary. 2013 Jul 9. [Epub ahead of print]

Abstract
Acromegaly increases cancer risk. We aimed to determine the prevalence and the predictors of tumors in acromegalic patients treated at our department. We retrospectively evaluated 160 acromegalic patients [79 female (mean age 52.0 ± 10.4 years) and 81 male (mean age 49.1 ± 12.4 years)] between 1990 and 2012, with a mean follow up period of 7.1 ± 5.7 years. The patients were screened with colonoscopy, mammography, thyroid and prostate ultrasonography. Malignancy was found in 34 (21.3 %) patients. No significant difference was observed in the distribution of malignancy among sexes (20.3 % in F vs. 22.2 % in M). Thyroid cancer was the most frequent (n = 17, 10.6 %) followed by the breast cancer (n = 4, 2.5 %) and colorectal cancer (n = 3, 1.8 %). Renal cell cancer in two patients, bladder cancer in two patients, periampullary tumor, rectal carcinoid tumor, malignant melanoma, prostate cancer, lung cancer, parotid mucoepidermoid carcinoma and malignant mesenchymal tumor in brain in one patient were detected. One patient had both thyroid and renal cell cancer. Age of patients at diagnosis of acromegaly was significantly higher in patients with cancer (45.8 ± 9.9 vs. 40.9 ± 11.3 years, $p < 0.05$). No significant difference was found in duration of the disease, initial GH levels and IGF-1 % upper limit of normal values, the prevalence of diabetes, hypertension, coronary heart disease, hyperlipidemia and treatment modalities between the patients with/without cancer. In logistic regression analysis, older age at diagnosis was associated with malignancy risk. The risk of cancer in acromegaly especially the thyroid cancer risk seems to be more increased than known in the literature. Therefore, acromegaly patients should be screened routinely for cancer, especially for thyroid cancer due to it being up to four times higher prevalence than breast and colorectal cancer.

The relationship between early atherosclerosis and endothelial dysfunction in type 1 diabetic patients as evidenced by measurement of carotid intima-media thickness and soluble CD146 levels: a cross sectional study.

Dogansen SC, Helvaci A, Adas M, Onal SD.
Department of Cardiology, Internal Medicine Clinic, Okmeydani Training and Research Hospital, Istanbul,
Cardiovasc Diabetol. 2013 Oct 18;12(1):153. doi: 10.1186/1475-2840-12-153.

Abstract
Background: Detection of early vascular changes prior to clinical manifestations of atherosclerosis, such as increased arterial carotid intima-media thickness (CIMT) and impaired endothelial function is of paramount importance for early identification of subjects at increased risk of accelerated atherosclerosis. The present study was designed to evaluate the relationship between early atherosclerosis and endothelial dysfunction in type 1 diabetic patients based on measurements of CIMT and soluble CD146 (sCD146) levels.
Methods: Thirty-seven patients with type 1 diabetes, 14 males (37.8%) and 23 females (62.2%), of mean (SD) age 26.2 (4.1) years admitted to the outpatient diabetes clinic at Okmeydani Training and Research Hospital, Istanbul, between January 2008 and December 2012, and 37 healthy controls, 16 males (43.2%) and 21 females (56.8%), of mean (SD) age 25.8 (3.1) years, selected from relatives of patients, were included. Anthropometric measures; fasting plasma glucose; and serum HbA1c, total cholesterol, HDL-cholesterol, LDL-cholesterol, triglyceride and creatinine concentrations were compared, as were CIMT and serum sCD146.
Results: Mean (SD) sCD146 levels were significantly higher in patients than in controls (314.6 (141.9) ng/ml vs. 207.8 (34.5) ng/ml, $p = 0.001$), but mean (SD) CIMT did not differ (0.5 (0.1) mm vs. 0.4 (0.1) mm). ROC curves for sCD146 significantly differed in differentiating type 1 diabetics from healthy controls ($p = 0.0047$) with a significantly higher percentage of patients than controls having sCD146 levels >260 ng/ml (21/37 (56.8%) vs. 2/37 (5.4%), $p = 0.00011$).
Conclusion: Our findings emphasize that sCD146 levels may be a more sensitive marker than CIMT for earlier identification of type 1 diabetic patients at high risk for atherosclerosis.

Mutations in the AVPR2, AVP-NPII, and AQP2 genes in Turkish patients with diabetes insipidus.

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Endocrine. 2012 Dec;42(3):664-9. doi: 10.1007/s12020- 012-9704-1. Epub 2012 May 29.

Abstract

The aim of this study was to identify mutations in three different genes, the arginine-vasopressin-neurophysin II (AVP-NPII) gene, the arginine-vasopressin receptor 2 (AVPR2) gene, and the vasopressin-sensitive water channel aquaporin-2 (AQP2) gene in Turkish patients affected by central diabetes insipidus or nephrogenic diabetes insipidus. This study included 15 patients from unrelated families. Prospective clinical data were collected for all patients including the patients underwent a water deprivation-desmopressin test. The coding regions of the AVPR2, AQP2, and AVP-NPII genes were amplified by polymerase chain reaction and submitted to direct sequence analysis. Of the 15 patients with diabetes insipidus referred to Gulhane Military Medical Academy, Department of Endocrinology and Metabolism, eight patients have AVPR2 mutations, five patients have AQP2 mutations and two patients have AVP-NPII mutations. Of the patients, which have AVPR2 mutations, one is compound heterozygous for AVPR2 gene. Seven of these mutations are novel. Comparison of the clinical outcomes of these mutations may facilitate in understanding the functions of AVP-NPII, AQP2, and AVPR2 genes in future studies.

Investigation of serum bisphenol A, vitamin D, and parathyroid hormone levels in patients with obstructive sleep apnea syndrome.

Erden ES, Genc S, Motor S, Ustun I, Ulutas KT, Bilgic HK, Oktar S, Sungur S, Erem C, Gokce C.
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Endocrine. 2013 Aug 1. [Epub ahead of print]

Abstract

Obstructive sleep apnea syndrome (OSAS) is a common health problem, and associated with obesity, metabolic syndrome (MetS), and diabetes. Growing evidence shows that 25-hydroxyvitamin-D_3 (25-OH-D) insufficiency and high parathyroid hormone (PTH) levels may be correlated to glucose intolerance, MetS, obesity, and cardiovascular abnormalities similar to OSAS. Bisphenol A (BPA) is an endocrine disruptor agent which exerts a wide variety of metabolic effects. It has estrogenic activity and its exposure may contribute to weight gain, obesity, impaired glucose metabolism, and the development of diabetes, also similar to OSAS. The aim of this study is to investigate the relationships between OSAS and serum BPA, 25-OH-D, and PTH levels. This study enrolled 128 subjects, with all of the OSAS patients having been diagnosed by polysomnography. The 128 subjects were divided into three groups: a control (n = 43), a moderate OSAS (n = 23) (AHI = 15-30), and a severe OSAS groups (n = 62) (AHI > 30). The serum BPA, 25-OH-D, and PTH levels for each subject were analyzed. 25-OH-D was lower in both OSAS groups, and PTH was higher in the OSAS groups than in the control subjects. The BPA levels were higher in the severe OSAS group than the moderate OSAS and control. There was a positive correlation between the BPA and body mass index, and a negative correlation between the 25-OH-D and BPA levels in all of the individuals. OSAS is related to high BPA and PTH levels, and low vitamin D levels. There is a positive association between BPA levels and OSAS, and the severity of OSAS. These results suggest that the BPA levels may have a role in the pathogenesis of OSAS.

Is There U Turn From Insulin Back to Pills in Diabetes?

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Curr Vasc Pharmacol. 2013 Apr 25. [Epub ahead of print]

Abstract

Type 2 diabetes is characterized by insulin resistance together with progressive loss of beta-cell function. After recognition of gluco- and lipo-toxicity, attention was focused on the preservation and/or restoration of beta cell function, especially at the early stages of the diabetes, with better beta-cell reserve and in the absence of complications. Early treatment of glucotoxicity with insulin was searched by early insulin treatment studies, and these studies have some promising results, pointing the possibility of "remission" of diabetes in some patients. According to the results of these studies, patients with early diagnosis of diabetes, the ones with better beta cell reserve, patients with low tendency for "insulin-abuse" could make "U' -turn from insulin to pills or even drug-free life. Criteria to turn back to pills could be listed as disappearance of diabetic symptoms, daily insulin need < 0.25 unit/kg, euglycemia in both fasting and postprandial state, and better beta cell function. The main problems in early insulin treatment are the "insulin resistance" of both patients and doctors, hypoglycemia, weight gain and increased appetite. Meanwhile, hyperinsulinemia desensitizes receptors and causes worsening of situation in a vicious cycle of insulin resistance and hyperglycemia. Therefore, patients should be selected properly and U-turn could be performed in relevant conditions explained in the text. It could be possible to see early insulin treatment and U-turn strategies in future guidelines for type 2 diabetes.

Impact of exercise on quality of life and body-self perception of patients with acromegaly.

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Division of Endocrinology and Metabolism, Department of Internal Medicine, Cerrahpasa Medical School, Istanbul University, Istanbul, Turkey.

Pituitary. 2014 Feb;17(1):38-43. doi: 10.1007/s11102-013-0463-7.

Abstract

In acromegaly the impact of therapy on well-being and self-perception of patients is not clearly defined. The data existing on the effect of treatment on health-related quality of life in patients with acromegaly is inconclusive. In this study we addressed the effect of exercise on health-related quality of life, symptoms of depression and perception of body image in patients with acromegaly. Patients with acromegaly were stratified into two groups according to their participation in a prescheduled program of exercise. Participants in the study group performed exercise for 75 min a day for 3 days a week during cosecutive 3 months. Warming, cardio, strength, balance and stretching moves applied in every course. Both the exercise group and control group were asked to complete a questionnaire on quality of life, symptoms of depression and self-perception of body image. Each questionnaire was answered by both groups before the beginning of the exercise program (at month-0) and after the completion of the program (at month-3). In exercise group after the completion of exercise period there was a tendency towards decreament in body mass index and IGF-I, although not statistically significant ($p = 0.08$ and $p = 0.09$). Self-assessment of body image improved significantly after participation in the exercise program ($p = 0.01$). Present findings support that exercise may be an adjunctive method for patients with acromegaly to improve self esteem and perception.

Three years prospective investigation of pituitary functions following subarachnoid haemorrhage.

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Pituitary. 2013 Mar;16(1):76-82.

Abstract

Subarachnoid haemorrhage (SAH) is known to be related to pituitary dysfuntion in retrospective and short-term prospective studies. We aimed to investigate pituitary functions in patients with SAH in longer follow-up periods to demonstrate if pituitary hormone deficiencies recover, persist or new hormone deficiencies occur. Twenty patients with SAH, who were followed up for 3 years, were included in the present study. Patients were evaluated with basal hormone levels and glucagon stimulation test (GST). Serum basal cortisol and adrenocorticotropic hormone (ACTH) levels were found to be significantly elevated at 3rd year of SAH compared to 1st year. Other basal hormone levels at 3rd year did not show a significant change from the levels found at 1st year. One of the patients had ACTH deficiency at 1st year of SAH and recovered at 3rd year. Growth hormone (GH) deficiency, according to GST,was diagnosed in 4 patients. One patient with GH deficiency at first year was still deficient, 3 of them recovered and 3 patients were found to have new-onset GH deficiency 3 years after SAH. SAH is associated with anterior pituitary dysfunction and GH is the most frequently found deficient hormone in the patients. Although one year after SAH seems to be an appropriate time for the evaluation of pituitary functions, further follow-up may be required at least in some cases due to recovered and new-onset hormone deficiencies at 3rd year of SAH.

Left ventricular synchronicity is impaired in patients with active acromegaly.

Kırış A, Erem C, Turan OE, Civan N, Kırış G, Nuhoğlu I, Ilter A, Ersöz HO, Kutlu M.
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Endocrine. 2013 Aug;44(1):200-6. doi: 10.1007/s12020-012-9859-9. Epub 2012 Dec 20.

Abstract

Acromegaly is associated with a variety of cardiovascular disturbances such as left ventricular hypertrophy, diastolic cardiac dysfunction, and hypertension. Left ventricular (LV) dyssynchrony means the impairment of synchronicity and is defined as the loss of the simultaneous peak contraction of corresponding cardiac segments. The objective of this study was to investigate whether acromegalic patients have left ventricular dyssynchrony. Dyssynchrony was evaluated in 30 patients with active acromegaly and 30 controls. All the patients and controls were subjected to a tissue synchronization imaging. The time to regional peak systolic tissue velocity (Ts) in LV by the six-basal-six-mid-segmental model was measured on ejection phase TSI images and four TSI parameters of systolic dyssynchrony were computed. All TSI parameters of LV dyssynchrony increased in patients with acromegaly compared to the controls: the standard deviation (SD) of the 12 LV segments Ts (43.5 ± 13.5 vs 26.2 ± 12.5, $p < 0.001$); the maximal difference in Ts between any 2 of the 12 LV segments (133.3 ± 38 vs 84.6 ± 37.6, $p < 0.001$); the SD of the 6 basal LV segments (41.1 ± 15.9 vs 25.4 ± 14.8, $p = 0.001$); and the maximal difference in Ts between any 2 of the 6 basal LV segments (102.6 ± 37.5 vs 65.2 ± 36.9, $p = 0.001$). In addition, there were significant relationships between the levels of growth hormone/insulin-like growth factor-1 and Ts-SD-12. LV synchronicity has been impaired in patients with acromegaly. Left ventricular dyssynchrony is associated with disease activity and it may contribute to the harmful cardiovascular effects of acromegaly.

Familial acromegaly due to aryl hydrocarbon receptor-interacting protein (AIP) gene mutation in a Turkish cohort.

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Pituitary. 2013 Jun 7. [Epub ahead of print]

Abstract

Aryl hydrocarbon receptor-interacting protein (AIP) is associated with 15-20 % of familial isolated pituitary adenomas and 50-80 % of cases with AIP mutation exhibit a somatotropinoma. Herein we report clinical characteristics of a large family where AIP R304X variants have been identified. AIP mutation analysis was performed on a large (n = 52) Turkish family across six generations. Sella MRIs of 30 family members were obtained. Basal pituitary hormone levels were evaluated in 13 family members harboring an AIP mutation. Thirteen of 52 family members (25 %) were found to have a heterozygous nonsense germline R304X mutation in the AIP gene. Seven of the 13 mutation carriers (53.8 %) had current or previous history of pituitary adenoma. Of these 7 mutation carriers, all but one had somatotropinoma/somatolactotropinoma (85.7 % of the pituitary adenomas). Of the 6 acromegaly patients with AIP mutation (F/M: 3/3) the mean age at diagnosis of acromegaly was 32 ± 10.3 years while the mean age of symptom onset was 24.8 ± 9.9 years. Three of the six (50 %) acromegaly cases with AIP mutation within the family presented with a macroadenoma and none presented with gigantism. Biochemical disease control was achieved in 66.6 % (4/6) of the mutation carriers with acromegaly after a mean follow-up period of 18.6 ± 17.6 years. Common phenotypic characteristics of familial pituitary adenoma or somatotropinoma due to AIP mutation vary between families or even between individuals within a family.

A five year prospective investigation of anterior pituitary function after traumatic brain injury: is hypopituitarism long-term after head trauma associated with autoimmunity?

Tanriverdi F, De Bellis A, Ulutabanca H, Bizzarro A, Sinisi AA, Bellastella G, Amoresano Paglionico V, Dalla Mora L, Selcuklu A, Unluhizarci K, Casanueva FF,Kelestimur F.
Department of Endocrinology, Erciyes University Medical School, Kayseri, Turkey.

J Neurotrauma. 2013 Aug 15;30(16):1426-33. doi: 10.1089/neu.2012.2752. Epub 2013 Jul 17.

Abstract

Traumatic brain injury (TBI) has been recently recognized as a common cause of pituitary dysfunction. However, there are not sufficient numbers of prospective studies to understand the natural history of TBI induced hypopituitarism. The aim was to report the results of five years' prospective follow-up of anterior pituitary function in patients with mild, moderate and severe TBI. Moreover, we have prospectively investigated the associations between TBI induced hypopituitarism and presence of anti-hypothalamus antibodies (AHA) and anti-pituitary antibodies (APA). Twenty five patients (20 men, five women) were included who were prospectively evaluated 12 months and five years after TBI, and 17 of them also had a third-year evaluation. Growth hormone (GH) deficiency is the most common pituitary hormone deficit at one, three, and five years after TBI. Although most of the pituitary hormone deficiencies improve over time, there were substantial percentages of pituitary hormone deficiencies at the fifth year (28% GH, 4% adrenocorticotropic hormone [ACTH], and 4% gonadotropin deficiencies). Pituitary dysfunction was significantly higher in strongly AHA- and APA-positive (titers ≥1/16) patients at the fifth year. In patients with mild and moderate TBI, ACTH and GH deficiencies may improve over time in a considerable number of patients but, although rarely, may also worsen over the five-year period. However in severe TBI, ACTH and GH status of the patients at the first year evaluation persisted at the fifth year. Therefore, screening pituitary function after TBI for five years is important, especially in patients with mild TBI. Moreover, close strong associations between the presence of high titers of APA and/or AHA and hypopituitarism at the fifth year were shown for the first time.

The frequency of malignancy and the relationship between malignancy and ultrasonographic features of thyroid nodules with indeterminate cytology.

Tutuncu Y, Berker D, Isik S, Akbaba G, Ozuguz U, Kucukler FK, Göcmen E, Yalcın Y, Aydin Y, Guler S.
Department of Surgery, Ministry of Health, Ankara Numune Research and Training Hospital, Ankara, Turkey.

Endocrine. 2013 Mar 17. [Epub ahead of print]

Abstract

Various approaches are available for the management of nodules that are evaluated to be indeterminate according to the results of thyroid fine needle aspiration biopsy. The present study aimed to determine the rate of malignancy and the ultrasonographic features that could be used as predictor of malignant pathologies at the nodules with indeterminate cytology. A total of 201 patients who underwent total thyroidectomy and whose fine needle aspiration biopsy results were evaluated to be Hurthle cell lesion (n = 99), follicular neoplasm (n = 61) or suspicious for malignancy (n = 41) were enrolled in this study. Of these patients, 178 were females (88.6 %) and 23 were males (11.4 %). The rates of malignancy were found to be 33.3 % in the Hurthle cell lesion group, 23.0 % in the follicular neoplasm group and 53.7 % in the suspicious for malignancy group (p = 0.006). The comparison of the ultrasonographic characteristics of the malignant and benign nodules revealed hypoechogenicity and microcalcification to be more common in malignant nodules (34.3 vs. 16.9 %, p = 0.005; 27.1 vs. 13.1 %, p = 0.014; respectively). While 92.3 % of the malignant nodules were ≥1 cm, 82.9 % of the benign nodules were ≥1 cm (p = 0.042). In the current study, malignancy was observed in 33.3 % of the Hurthle cell lesion group, 23 % of the follicular neoplasm group and 53.7 % of the suspicious for malignancy group. In addition, we detected that microcalcification and benign hypoechoic at patients with indeterminate cytology can be related with increased risk of malignancy. We believe that as the patients at Hurthle cell lesion group have higher risk of malignancy than the patients with Follicular Neoplasia, total thyroidectomy will be suitable for these patients.

Comparison of octreotide LAR and lanreotide autogel as post-operative medical treatment in acromegaly.

Tutuncu Y, Berker D, Isik S, Ozuguz U, Akbaba G, Kucukler FK, Aydin Y, Guler S.
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Pituitary. 2012 Sep;15(3):398-404. doi: 10.1007/s11102-011-0335-y.

Abstract

Long-acting somatostatin analogs are frequently used as adjuvant treatment of acromegaly patients after noncurative surgery. This sudy aims to compare the efficacy of octreotide long-acting release (OCT) and lanreotide Autogel (LAN) in acromegaly patients. Sixty-eight patients not cured by transsphenoidal endoscopic or microscopic pituitary surgery between 2003 and 2009 were retrospectively analyzed (25 men; 43 women; mean age 41.1 ± 10.9 years [range 18-65 years]). The patients were assigned randomly to OCT (n = 36) and LAN (n = 32) groups. Evaluations included insulin-like growth factor I (IGF-I) and growth hormone (GH) after oral glucose tolerance test (OGTT) 3, 6, 12 and 18 months after starting medical treatment; pituitary magnetic resonance imaging was performed before treatment and after 3 and 12 months. Patients achieving IGF-I levels within the age and gender normal range and GH level <1 µg/l following OGTT were considered a 'biochemical cure'. Mean IGF-I and GH values and tumor volumes (cm(3)) in the LAN and OCT groups were similar in the post-operative period before initiation of medical treatment. A statistically significant decrease in GH and IGF-I levels was obtained for both treatment groups at each follow-up visit compared to the previous value. Tumor shrinkage after 12 months of treatment was statistically significant in both groups but the percentage tumor shrinkage (28.5% vs. 34.9%, P = 0.166) and rate of patients achieving biochemical cure (63.9 and 78.1%, P = 0.454) were similar between OCT and LAN groups, respectively. OCT and LAN treatment options have similar efficacy for ensuring biochemical cure and tumor shrinkage in acromegaly patients who had noncurative surgery.

QT dispersion in patients with acromegaly.

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Endocrine. 2013 Apr;43(2):419-23. doi: 10.1007/s12020-012-9828-3. Epub 2012 Nov 13.

Abstract

Acromegaly is a rare condition caused by a pituitary adenoma that secretes growth hormone. The mortality rate is 72 % higher in patients with acromegaly than in the general population according to meta-analyses. Mortality analysis has shown as many as 60 % of acromegalic patients die due to cardiovascular disease. Sudden cardiac death may occur in patients with acromegaly and malignant ventricular arrhythmia may play an important role in this fatal complication; however, the precise mechanism is not fully known. QT dispersion (dQT) is an electrophysiological factor known to be associated with a tendency for ventricular arrhythmia and sudden cardiac death. This study aimed to evaluate dQT as an early predictor of ventricular tachyarrhythmia, as sudden cardiac death commonly occurs in acromegalic patients. This cross-sectional case-control study enrolled 20 patients (10 female and 10 male) with acromegaly and 20 healthy controls (11 female and 9 male) after exclusion criteria were applied. Each participant underwent 12-lead electrocardiography, including ≥3 QRS complexes, at a speed of 25 mm/s after a 15-min rest. In each participant, the QT interval (beginning of the Q wave to the end of the T wave) was corrected (QTc) for heart rate using Bazett's formula [Formula: see text] QTc dispersion (dQTc) (QTc max - QTc min) was also calculated. There was no significant difference in median dQTc between the acromegalic patients (0.79 s) and the controls (0.45 s) (p > 0.05). Active acromegalic patients (n = 14) were estimated to have a median dQTc of 0.82 s, after excluding from the analysis six patients that were under full biochemical control, and that had randomly obtained growth hormone levels <0.4 ng/mL, GH <1 ng/mL based on oral glucose tolerance test, and normal IGF-I for age and gender. A significant difference was noted in median dQTc between the active acromegalic patients and the controls (p = 0.015). The dQT in active acromegalic patients was longer than that in the control group, which indicates that patients with active acromegaly might have an elevated risk for ventricular arrhythmia. We think that a non-invasive, simple and inexpensive marker-measurement of dQT-as part of cardiac monitoring could be valuable for screening complications in acromegalic patients.

Management of differentiated thyroid cancer in the presence of resistance to thyroid hormone and TSH-secreting adenomas: a report of four cases and review of the literature.

Ünlütürk U, Sriphrapradang C, Erdoğan MF, Emral R, Güldiken S, Refetoff S, Güllü S.
Ankara University School of Medicine, Department of Endocrinology and Metabolism, Ankara, Turkey.

J Clin Endocrinol Metab. 2013 Jun;98(6):2210-7. doi: 10.1210/jc.2012-4142. Epub 2013 Apr 3.

Abstract

Background: An increased or normal serum TSH concentration, despite elevated thyroid hormone levels, is observed in resistance to thyroid hormone (RTH) and TSH-secreting adenomas (TSHomas). When coexistent with a differentiated thyroid cancer (DTC), maintenance of a suppression of TSH is challenging.
Objectives: The aim of the study was to discuss the pitfalls arising from the failure to suppress TSH secretion in DTC and the strategies for proper treatment of DTC in association with RTH and TSHoma.
Methods: Four unusual cases of DTC associated with TSHoma (2 cases), RTH (1 case), and an elevated TSH of unknown etiology (1 case) are presented, and the literature is reviewed.
Results: Although a persistent mild TSH elevation may not be a risk factor for the development of DTC, it represents an important problem during the treatment of DTC. Aggressive treatment options should be applied in the proper order to prevent tumor recurrence and persistence in the absence of ideal TSH suppression.
Conclusions: Although there is no agreed consensus regarding the management of DTC in the presence of persistent hyperthyrotropinemia, complete tumor removal followed by radioablation and attempts to reduce the serum TSH to the lowest tolerable level are recommended. The outcomes in the reported cases have not been unfavorable, despite the persistence of nonsuppressed TSH.

Effects of L-thyroxine therapy on circulating leptin and adiponectin levels in subclinical hypothyroidism: a prospective study.

Yildiz BO, Aksoy DY, Harmanci A, Unluturk U, Cinar N, Isildak M, Usman A, Bayraktar M.
Endocrinology and Metabolism Unit, School of Medicine, Hacettepe University, Ankara, Turkey.

Arch Med Res. 2013 May;44(4):317-20. doi: 10.1016/j.arcmed. 2013.04.010. Epub 2013 May 15.

Abstract

Subclinical hypothyroidism (SCH) is defined by increased thyrotropin (TSH) and normal free thyroxine (fT4) levels. Controversial data are available regarding the effects of SCH on adipose tissue. Adiponectin and leptin are two major adipokines secreted from adipose tissue. We aimed to determine the levels of adiponectin and leptin in women with SCH and potential effects of L-thyroxine therapy on those levels. Forty three women with SCH and 53 age- and BMI-matched healthy euthyroid control women were included. Adiponectin and leptin levels, total cholesterol (TC), triglycerides (TG), HDL-, and LDL cholesterol, fat mass (FM) and fat-free mass (FFM) were determined in all participants. Patients received L-thyroxine treatment for 6 months after which all measurements were repeated. Patients with SCH and controls had similar baseline values for adiponectin, leptin, lipids, FM and FFM. All patients reached euthyroid status after 6 months of replacement therapy. Treatment resulted in an increase in adiponectin ($p < 0.01$) and a decrease in leptin levels ($p < 0.05$). Lipid levels, FM and FFM did not show a significant change. Achievement of euthyroid status by replacement therapy increases adiponectin and decreases leptin levels in women with SCH in this prospective study independent of a change in body fat mass.

Duyurular

- Prof. Dr. H. Fahrettin Keleştemur, Bayındır Sağlık Grubu **14. Bayındır Tıp Ödülleri 2013** Yılı Bilim Ödülünü almıştır.
- Prof. Dr. H. Fahrettin Keleştemur, *Clinical Endocrinology Dergisi* Editorial Board üyeliğine seçilmiştir.

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