REPLACEMENT THERAPY ON QUALITY OF LIFE AND AMETERS IN CURED ACROMEGALIC PATIENTS WITH NE DEFICIENCY

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frequently occur in acromegalic patients cured after surgery and/or :r, the effects of GH replacement therapy in these patients have been s study, metabolic parameters and quality of life in cured acromegalic ve been evaluated. The whole cohort included 40 GHD subjects [mean I 27±3 kg/m^2]:8 were acromegalics treated with rhGH (Group A), sex-matched acromegalics who refused treatment (Group B) and 20 evious non-functioning pituitary adenoma on rhGH (Group C) served els, lipid profile, glucose metabolism (fasting and post-OGTT glucose, A1c), anthropometric parameters [BMI, waist circumference, body fat quality of life [evaluated by the Quality of Life Adult GHD Assessment evaluated in all patients at the time of GHD diagnosis and after 12 roup A and C (mean dose 0.28 ±0.02 mg/day) or followed-up in Group B showed higher IGF-I levels evaluated as standard deviation score (-1.4±0.8 *vs* -2.2±0.5 and -2.4±0.5, respectively, *P*=0.01), better QoL-:s (-0.4±0.1 vs -1.9±0.9, *P*=0.01) and higher post-OGTT glucose levels dl, *P*=0.05) than Group A.No difference among Groups was recorded After 12 months, IGF-I levels significantly increase in group A and C 9 SDS, respectively, *P*<0.004 *vs* baseline). A decrease in BF% (from nd from 33±9 to 30±9 in Group A and C, respectively, *P*<0.01) and total-2±50 to 203±57 and from 261±56 to 209±51 mg/dl in Group A and C, was observed. QoL-AGHDA scale scores significantly improved on o -0.9±1.2 and from -1.5±1.1 to -0.7±1.4, in Group A and C respectively, ., fasting and post-OGTT glucose levels, HbA1c and HOMA did not side effects were recorded. Conclusion:in GHD acromegalics, rhGH improved body composition, lipid profile and quality of life as in nd previous non-functioning pituitary adenoma, without deterioration . GH replacement therapy should therefore be considered in these :s with GHD from other causes.

CTH TEST AN EFFECTIVE ALTERNATIVE TO ITT IN THE ENTRAL HYPOADRENALISM IN ADULT PATIENTS WITH ASES?

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sulin tolerance test (ITT) remains the gold standard procedure for the l hypoadrenalism (HPAI) in patients with hypothalamic-pituitary contrary, recent studies confirmed that standard-dose corticotropin DCT, 250 µg ACTH test) has a wide variability in the cortisol ey area between 16 and 30 µg/dl.

PA axis function by ITT test in patients with pituitary disorders and of HPAI by SDCT.

ds. Insulin tolerance test (ITT) was performed in a cohort of 52 s (36F & 16M, mean age 40.4±10.7 yrs) referred to our centre for In 45 patients 30-minutes serum cortisol levels at SDCT was between ROUP A) while in 7 cortisol levels were below 16 µg/dl, in the absence al data and clinical symptoms of HPAI and any other pituitary P B). No patients showed 30-minutes serum cortisol levels at SDCT l.

esponse to ITT (peak cortisol levels ≥ 18 µg/dl) was found in the great A (38/45) and in about a half of GROUP B patients (4/7). Therefore, f a cut-off as low as 16 µg/dl, in this study SDCT showed a very low sitive predictive value with a quite good specificity and negative e=30%, PPV 42.8%; Sp=90.5%, NPV 84.4%). With regard to basal atient with confirmed diagnosis of HPAI by both tests showed levels /dl. Conversely, no patient with normal cortisol response to ITT showed 7 µg/dl.

is not a reliable tool to identify patients with HPAI. Additional studies ould be undertaken to revise the cut-off values of the test and to avoid ution therapies in patients with pituitary disorders.

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REPLACEMENT THERAPY AND QUALITY OF LIFE IMPROVEMENT IN ADULT GHD PATIENTS

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Adults with severe GH deficiency (GHD) have impaired physical and psychological well-being. Questions on Life Satisfaction-Hypopituitarism (QLS-H) is a questionnaire designed to verify the quality of life (QoL) in adults with hypopituitarism and to determine the effects of GH treatment on QoL. We evaluated QLS-H Z scores in a group of 47 patients (13 females and 34 males) with adult onset GHD treated with GH for a period of 5 years. The diagnosis of GHD was based on the results of a GHRH+Arginine stimulation test. Mean age (±SD) was 60±9 yr for females and 57±14 for males. The main cause of GHD was previous pituitary surgery for pituitary adenoma (especially non functioning adenomas), followed by other causes (head injury, Sheehan syndrome, empty sella, craniopharyngioma). The majority of patients had multiple hormonal deficits besides GHD. We evaluated QLS-H Z score separately in females and males patients with GHD according to age group (<25 years, 25-35, 35-45, 45-55, 55-65, 65-75 and 75-85) at baseline (before starting GH therapy) and after one year of GH replacement. When patients were divided by age group: the lowest score at baseline was found among 55-65 years old females and 45-55 years old males. One year of GH therapy improved QoL in all patients' groups, except in 35-45 years old women, whereas in 35-45 yr old men the highest QLS-H Z score was observed. QLS-H Z score analysis during 5 years of GH replacement therapy showed a progressive improvement of QoL in all patients. In males, QLS-H Z score significantly ($p<0.0001$) increased during the first 2 yr of GH therapy and continued to slightly increase thereafter. In females, QLS-H Z score significantly ($p=0.006$) increased during the first 1 year of GH therapy and remained unchanged in the following years. Our data confirm a significant effect of GH replacement on psychological well being in all decades of adult life, being more evident in males. In conclusion, evaluation of QoL is an important part of clinical management of GHD patients treated with GH, complementing the evaluation of clinical and biological end points.

PP100

ENDOCRINE AND PRO-INFLAMMATORY ACTIVITY OF VISCERAL (VAT) AND SUBCUTANEOUS (SAT) ADIPOSE TISSUES IN MORBIDLY OBESE PATIENTS WITH AND WITHOUT METABOLIC SYNDROME

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Background: Morbid obesity causes a decline in life expectancy due to its associated metabolic and cardiovascular risks. Thus differentiating obese individuals with high risk for metabolic diseases from those who are metabolically 'healthy' is considered of great importance, because the genetic and molecular bases remain poorly understood and difficult to evaluate. **Aim:** To investigate the differences in leptin, adiponectin and TNF-a gene expression in visceral adipose tissue (VAT) and subcutaneous adipose tissue (SAT) compared to morbidly obese subjects (BMI > 40 Kg/m^2) with and without metabolic syndrome (MetS). **Methods:** The adipose tissue depots were obtained by bariatric surgery. Total RNA was extracted from VAT and SAT of 22 patients with morbid obesity (11 with MetS and 11 without MetS) and was reverse transcribed with Oligodt and Improm II Reverse Transcriptase, according to standard methods. Adiponectin, leptin and TNF-a expression was analyzed by real-time quantitative PCR (qRT-PCR) using LightCycler. Gene expression was normalized against β-actin gene and then against gene expression mean values in fat samples from normal weight subjects without MetS. **Results**: The normalized gene expression overlapped between the two groups with the exception of a significant higher leptin VAT expression in obese subjects with MetS than those without MetS ($p = 0.020$). Regarding differences in gene expression between VAT and SAT in simple obesity, only a significant low adiponectin expression was found in VAT. By contrast in obesity with MetS, VAT was characterized by a low adiponectin expression ($p = 0.010$), leptin ($p = 0.050$) and TNF- a ($p = 0.003$).**Conclusion:** Our study shows an increased pro-inflammatory and endocrine activity in SAT compared to VAT in morbidly obese patients with MetS.