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preliminary study, the seated saline infusion test (SSIT) was more sensitive than the recumbent saline infusion test (RSIT) for the diagnosis and subtype classification of PA. However, it is unclear whether the SSIT is suitable for Chinese PA patients.
Objective:
We prospectively investigated the accuracy of the seated saline infusion test (SSIT) in 113 patients with hypertension (including 93 PA and 20 essential hypertension (EH) patients) in the Department of Endocrinology and Metabolism.
Approach and Results:
Each patient underwent an recumbent saline infusion test (RSIT) and seated saline infusion test (SSIT). The accuracy of the SSIT for a confirmative primary aldosteronism (PA) diagnosis and subtype classification was evaluated and compared with the RSIT. The area under the receiver operating characteristic (ROC) curve (AUC) of aldosterone for the SSIT was significantly greater than that for the RSIT (0.945±0.0199 vs 0.828±0.0404; P<0.05). The ROC analysis showed that the optimal plasma aldosterone cutoff values were 12.94 ng/dl for the SSIT (sensitivity 86.02%, specificity 95%; Youden index (YI)=0.810) and 12.04 ng/dl for the RSIT (sensitivity 83.15%, specificity 57%; Youden index (YI)=0.401). The optimal aldosterone concentration cutoff value for classifying aldosterone-producing adenoma (APA) and idiopathic hyperaldosteronism (IHA) was 18.12 ng/dl for the SSIT (sensitivity 73.5%, specificity 79.5%). No patients experienced adverse events during the SSIT.
Conclusions:
The SSIT was safe and convenient for PA diagnosis. The accuracy of the SSIT for a confirmatory diagnosis of PA was better than that of the RSIT. The SSIT is a reliable alternative for PA confirmation in Chinese individuals.

Neuroendocrinology and Pituitary
NEUROENDOCRINE & PITUITARY PATHOLOGIES

Importance of Sexual Function Assessment in Multidimensional Evaluation of AGHD Patients: Results from the MAGHD Study.

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Background: Adult growth hormone deficiency (AGHD) is a debilitating clinical condition leading to decreased quality of life (QoL). The impact of reduced muscle mass, weakening and loss of vitality on QoL have been well characterized in AGHD. The impact of AGHD on sexual function, a recognized factor able to modify well-being, has never been investigated. Aim: To investigate the prevalence of sexual dysfunction in AGHD patients referring to a single endocrinological center and grouped according to their history of r-hGH therapy.Methods: The Management of Adult Growth Hormone Deficiency (MAGHD) Study is a prospective, real-life trial aiming to improve management of AGHD patients through a smartphone app (MAGHD App) and a wearable device. The 83 AGHD enrolled patients (31 Females, 52 Males, mean age 56.27 + 14.68 years) were divided in 3 groups (G) according to r-hGH therapy: on long-term r-hGH therapy (G1, n=32), previously treated with r-hGH (G2, n=20), never treated (G3, n=31). Within the first phase of the study, a large database was created collecting clinical, biochemical and psychological data. In addition to QLS-H and QoL-AGHDA routinely used to assess QoL, IIEF-15 and FSFI were employed to evaluate sexual function in males and females, respectively. The nonparametric Kruskal-Wallis test was used for comparison among 3 groups.Results: Here only baseline data of the MAGHD Study are presented.According to IIEF-15 results, the prevalence of erectile dysfunction (ED) in male AGHD cohort was 60%. Erectile function (EF) score was significantly higher in G1 compared to both G2 and G3 ($p < 0.05$) with an ED prevalence of 35% in G1, 75% in G2 and 75% in G3. Even excluding patients with serum testosterone lower than 2 ng/ml and older than 65 years, ED prevalence did not change significantly in the 3 groups. Moreover, EF domain was inversely and directly correlated to age ($R^2$0.130, β-0.360) and IGF1 levels ($R^2$0.156, β0.395), respectively. The prevalence of female sexual dysfunction according to FSFI was 89.3%. Even though desire, arousal, lubrication and overall scores were significantly higher (better results) in G1 compared to G2 and G3 ($p < 0.05$), no correlation resulted between FSFI domains and IGF1 levels. Instead an inverse correlation resulted between desire domain and age.Conclusions: This study, performed in a real-life clinical setting, demonstrates a high prevalence of sexual dysfunction in AGHD patients and that r-hGH treatment seems to be associated to better sexual outcomes. These results suggest that the evaluation of sexual function should be integrated in the global assessment of AGHD patients since sexual activity is a fundamental domain able to influence both well-being and QoL.

Neuroendocrinology and Pituitary
ADVANCES IN NEUROENDOCRINOLOGY

Estrogen Modulates Expression Levels of Gonadotropin-Releasing Hormone Receptor (GNRHR) in Immortalized Kisspeptin Neurons in Vitro

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In female animals, ovarian estradiol (E2) can act as both a negative feedback inhibitor of GnRH secretion, as well as a positive feedback stimulator at the time of ovulation. Both of these E2-regulated mechanisms work via stimulation or repression of two distinct neuronal populations of Kisspeptin (KP)-synthesizing neurons. While it is clear that AVPV KP neurons increase *kiss1* expression during the preovulatory surge on proestrus, subsequent secretory mechanisms required for potentiation of GnRH surge release remain unclear. Two KP-secreting cell lines, KTaV-3, which demonstrate increased *kiss1* expression under high E2 exposure, and KTaR-1, which exhibit *kiss1* suppression under low E2 exposure, were used to probe the presence of GnRH receptor (GnRHR) expression under different E2 exposure conditions.