Summary: These results suggest that endogenous PYY_{3-36} modulates meal patterning. The vagus nerve mediates physiological PYY_{3-36} signalling but alternative pathways, not exclusively via the ARC, may be more important in mediating its pharmacological effects. This is relevant for the design of more effective weight loss agents.

Reproductive Endocrinology

HYPERANDROGENISM

Cardiometabolic Profile of Brazilian Women with Polycystic Ovary Syndrome (PCOS): A Systematic Review and Meta-Analysis

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SUN-013

Introduction. PCOS is a frequent endocrine disease and its clinical expression may be influenced by ethnicity and sociocultural backgrounds. Despite its high prevalence, few studies are available regarding clinical characteristics of Brazilian women with PCOS. The aim of this study was to summarize the available evidence regarding metabolic risks in PCOS population in Brazil trough a systematic review and meta-analysis. **Materials and Methods**. We systematically searched EMBASE, MEDLINE, Cochrane Central Register of Controlled Trials for studies published until July 31, 2019. **Results**. Eleven cross-sectional and case-control studies were selected for the present meta-analysis, including 898 women diagnosed with PCOS and 2176 controls. All used the Rotterdam criteria for the diagnosis of PCOS. Compared to controls, BMI was higher in PCOS [standardized mean difference (SMD) 0.67 (95% CI 0.29, 1.05) I^2=91%], as well as waist circumference [SMD 0.88 (0.40, 1.37) I^2=93%]. Systolic and diastolic blood pressure were higher in PCOS, SMD 0.66 (0.30, 1.01) I^2=83%, SMD 0.55 (0.24, 0.87) I^2=81%, respectively. Glucose and HOMA-IR were higher in PCOS, SMD 0.22 (0.02, 0.41) I^2= 57%, SMD 0.78 (0.52, 1.04) I^2 =26% respectively. Regarding lipid profile, PCOS had higher values for triglyceride [SMD= 0.39 (0.14, 0.64, I^2 =63%)], total cholesterol [SMD 0.36 (0.15, 0.57, I^2=57%)] and LDL [SMD 0.44 (0.11, 0.78, I^2=82%)] and lower values for HDL [SMD -0.56 (-0.78, -0.34) I^2=68%]. **Conclusions**. Even though the studies considered were observational, including mostly small samples, the evidence from this meta-analysis indicates women with PCOS from different regions of Brazil present worse cardiometabolic profile than women without PCOS. This systematic review and meta-analysis is registered in PROSPERO (CRD42016038537).

Reproductive Endocrinology

MALE REPRODUCTIVE HEALTH - FROM HORMONES TO GAMETES

Insulin-Like Growth Factor and Fibroblast Growth Factor 21 in Men with Klinefelter Syndrome.

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SAT-046

Background: Men with 47, XXY Klinefelter syndrome (KS) commonly present with obesity, metabolic disorders, and insulin insensitivity. The insulin-like growth factor (IGF) system has pleiotropic effects including regulation of glucose metabolism. Fibroblast growth factor 21 (FGF21) is associated with weight loss and favourable metabolic changes, but patients with obesity or type 2 diabetes might be resistant to this effect despite presenting with increased levels. **Aim:** To describe levels of components in the IGF system and FGF21 among men with KS, either treated or not treated with testosterone supplementation therapy (TT), in comparison with control males. **Methods:** A total of 66 men with KS were included, 33 without current TT and 33 with current TT. A control group of 70 healthy age-matched males were included. Serum levels of insulin-like growth factor 1 (IGF-1), insulin-like growth factor-binding protein 3 (IGFBP3), pregnancy-associated plasma protein A (PAPP-A), FGF21, and fibroblast activation protein (FAP) were compared between the three groups applying the Kruskal-Wallis test. **Results:** Levels of (IGF-1 µg/L) were not different between the groups (median (25-75 %), untreated KS 162 (140-201.5), treated KS 165 (128.5-215), controls 176.5 (150.8-214.5), p=0.5). Similarly, FGF21 levels (ng/L) were comparable between the groups (median (25-75 %), untreated KS 84.7 (53.3-217.6), treated KS 97.2 (56.4-224.8), controls 100.3 (66.0-191.0), p=0.9). Levels of IGFBP3, PAPP-A and FAP were also found to be comparable between the groups (p≥0.2). **Conclusion:** This was the first study investigating FGF21 in men with KS. Our results indicate that regulation of the IGF-1 system and levels of FGF21 are not altered in men with KS compared with age-matched controls, and that TT in men with KS does not affect these systems.

Neuroendocrinology and Pituitary

CASE REPORTS IN SECRETORY PITUITARY PATHOLOGIES, THEIR TREATMENTS AND OUTCOMES

Priapism Secondary to Cabergoline

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SAT-270

Background: Cabergoline and Bromocriptine are ergot derivative long-acting dopamine agonist that are very effective and well tolerated in patients with hyperprolactinemia. A rare and unwanted side effect of Bromocriptine is priapism, which has hardly ever been report in literature and it's not cited under the medication insert. The underlying mechanism is not totally clear, but it is well known that