

P01-37 - EFFECTS OF TESTOSTERONE SUPPLEMENTATION ON DEPRESSIVE SYMPTOMS IN HYPOGONADAL MEN WITH THE METABOLIC SYNDROME: THE MOSCOW STUDY

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Introduction: Low testosterone levels in men are associated with the metabolic syndrome (MetS) as well as with depressive symptoms, low vitality and sexual dysfunction.

Objectives: To assess the effects of testosterone administration on these subjective symptoms, which have not extensively been studied in hypogonadal men with the MetS.

Method: In a randomized, placebo-controlled, double-blind, phase III trial, 184 men suffering from both the MetS and hypogonadism were included. They were treated for 30 weeks with either parenteral testosterone undecanoate (TU; 1000 mg IM testosterone undecanoate, at baseline, and after 6 and 18 weeks; Nebido®) or placebo injections. 105 (92.9%) men receiving TU and 65 (91.5%) receiving placebo completed the 30 week trial. The Beck Depression Inventory (BDI), Aging Males' Symptoms (AMS) scale, and International Index of Erectile Function 5-item (IIEF-5) scale at baseline, 18 and 30 weeks were analysed using multilevel analysis.

Results: The mean age was 52.1 years (range: 35-69), with a mean body mass index of 35.5 kg/m² (SD 6.7), and a mean total testosterone level of 8.0 nmol/L (SD 4.0). There were significant improvements in BDI (mean difference vs. placebo after 30 weeks: -2.5 points; 95% confidence interval [CI]: -0.9;-4.1; P=0.003), AMS (-7.4 points; 95% CI: -4.3;-10.5; P< 0.001), and IIEF-5 (+3.1 points; 95% CI: +1.8;+4.4; P< 0.001). The effects were strongest in men with baseline total testosterone levels < 7.7 mmol/L.

Conclusions: TU administration may improve depressive symptoms, aging male symptoms and sexual dysfunction in hypogonadal men with the MetS.