

Testosterone is an efficacious and safe tool in the weight management of elderly hypogonadal men

Background: Obesity negatively affects health and its (drug) treatment is largely unsuccessful. Obesity is associated with low serum testosterone (T), and, conversely, low T leads to weight gain and the metabolic syndrome. This study tested the effects and safety of normalization of testosterone in hypogonadal men.

Materials and methods: 136 hypogonadal men (38 – 83 years, mean  $60.6 \pm 8.0$  years), were treated with parenteral testosterone undecanoate for 4 years as the sole intervention.

Results: A remarkable sustained progressive statistically significant linear decline of body weight, waist circumference, (serum cholesterol, triglycerides, LDL-cholesterol. At baseline 52/136 met the criteria of the metabolic syndrome, after four years 10/136. A slow and steady increase in prostate volume / prostate specific antigen (PSA), PSA never exceeding 4 ng/mL. The residual volume of the bladder and scores on the International Prostate Symptoms Score (IPSS) decreased over the 48 month period. Hemoglobin and hematocrit (Hct) increased significantly reaching their maximum after 12-18 months; at any time point, nine patients had a hematocrit above 52% not requiring interventions.

Conclusion: A significant continuous improvement of features of the metabolic syndrome was noted. Testosterone may be a viable and safe option in weight management.

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