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ERECTILE DYSFUNCTION

Vardenafil in men with T2DM

Long-term daily vardenafil use in men with type 2 diabetes mellitus (T2DM) and erectile dysfunction (ED) improves endothelial and erectile function without causing relevant adverse effects, according to new data. The treatment also resulted in a rise of total testosterone levels into the eugonadal range in those who were hypogonadal at baseline.

Endothelial dysfunction is common in men with T2DM and is associated with ED. Previous studies indicate that phosphodiesterase type 5 inhibitor (PDE5I) use, such as vardenafil, might be beneficial in this setting. In this newly published long-term, double-blind clinical trial, 54 men with T2DM and ED were randomized to receive 10 mg vardenafil or placebo twice daily for 24 weeks. At baseline, men were equally distributed between groups regarding onset of T2DM, glycaemic control, flow-mediated dilation (FMD) scores and erectile function.

At 24 weeks, mean erectile function domain score of the 15-question International Index of Erectile Function questionnaire was significantly higher in men receiving vardenafil than in those receiving placebo ($P<0.001$). Measures of endothelial health also improved significantly under PDE5i treatment compared with placebo, specifically FMD scores ($P=0.04$) and IL-6 plasma levels ($P=0.017$). In addition, analysis of total testosterone levels in men who were hypogonadal (cut-off point 10.4 nmol/l) at baseline revealed that levels in those treated with the PDE5I increased into the eugonadal range within 1 week of treatment. No treatment-related adverse events were recorded throughout the study period.

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ORIGINAL ARTICLE Santi, D. *et al.* Six months of daily treatment with vardenafil improves parameters of endothelial inflammation and of hypogonadism in male patients with type 2 diabetes and erectile dysfunction: a randomized, double-blind, prospective trial. *Eur. J. Endocrinol.* http://dx.doi.org/10.1530/EJE-15-1100 (2016)