

Combined use of androgen and sildenafil for hypogonadal patients unresponsive to sildenafil alone

黃一勝

Thomas I.S. Hwang;H-E Chen;T-F Tsai;YC Lin;

摘要

Abstract

To investigate the therapeutic effect of androgen on hypogonadal patients unresponsive to sildenafil alone. In total, 32 hypogonadal patients with erectile dysfunction (ED), initially had an inadequate response to sildenafil (100mg). Oral testosterone undecanoate (Restandols, 80mg, bid or tid) alone was supplied for 2 months, and if patients could not achieve a satisfactory erection, combined use of testosterone and sildenafil was continued thereafter. Total testosterone (TT), free testosterone (FT), and the parameters of the International Index of Erectile Function (IIEF), International Prostate Symptom Score (IPSS), and uroflow rate (UFR) were assessed. Eleven patients (34.3%) achieved satisfactory erectile function after testosterone replacement only. Another 12 (37.5%) patients experienced satisfactory intercourse after combined therapy. Serum TT and FT levels significantly increased after the use of testosterone alone (4157163 vs 2207101 ng/dl, $P=0.01$; 10.474.6 vs 5.171.9 ng/dl; $P=0.01$, respectively) and the combined use of testosterone and sildenafil (4987178 vs 2207101 ng/dl, $P=0.01$; 11.774.6 vs 5.171.9 ng/dl, $P=0.001$, respectively); as did the IIEF score (14.876.8 vs 12.677.5, $P=0.01$, 17.575.2 vs 12.677.5, $P=0.001$, respectively). However, no statistical differences were demonstrated for IPSS or UFR. In conclusions, one-third of hypogonadal patients with ED who failed to respond to sildenafil, responded to testosterone alone, another third responded to sildenafil again after normalization of testosterone. So, in hypogonadal patients with ED, androgen supplementation is first-line therapy. If patients are unresponsive to androgen alone or sildenafil alone, combined use may improve erectile function and enhance the therapeutic effect of PDE-5 inhibitors.