

BENEFICIAL EFFECTS OF TESTOSTERONE THERAPY ON FUNCTIONAL CAPACITY, CARDIOVASCULAR PARAMETERS, AND QUALITY OF LIFE IN PATIENTS WITH CONGESTIVE HEART FAILURE

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Objective: According to the present evidences suggesting association between low testosterone level and prediction of reduced exercise capacity as well as poor clinical outcome in patients with heart failure, we sought to determine if testosterone therapy improves clinical and cardiovascular conditions as well as quality of life status in patients with stable chronic heart failure.

Material & Methods: A total of 50 male patients who suffered congestive heart failure were recruited in a double-blind, placebo-controlled trial and randomized to receive an intramuscular (gluteal) long-acting androgen injection (1mL of testosterone enanthate 250mg/mL) once every four weeks for 12 weeks or receive intramuscular injections of saline (1mL of 0.9% wt/vol NaCl) with the same protocol.

Results: The changes in body weight, hemodynamic parameters, and left ventricular dimensional echocardiographic indices were all comparable between the two groups. Regarding changes in diastolic functional state and using Tei index, this parameter was significantly improved. Unlike the group received placebo, those who received testosterone had a significant increasing trend in 6-walk mean distance (6MWD) parameter within the study period

Conclusion: Our study strengthens insights into the beneficial role of testosterone in improvement of functional capacity and quality of life in heart failure patients.