Effects of carvedilol on functional capacity, left ventricular function, catecholamines and oxidative stress in patients with chronic heart failure

Efectos del carvedilol en la capacidad funcional, función ventricular izquierda, catecolaminas y estrés oxi

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Introduction and objective. Carvedilol is an antioxidant and adrenergic antagonist with demonstrated benefits in terms of mortality from heart failure (HF). The aim of the present study was to evaluate clinical parameters, left ventricular function, oxidative stress levels and neurohumoral status at baseline and after 6 months of treatment with carvedilol in patients with chronic HF. Patients and method. Thirty patients with chronic HF that was stable without beta blocker treatment were included. Functional class was II or III, and left ventricular ejection fraction (LVEF) was < 40%. Mahler score, distance walked in 6 min, peak oxygen consumption, LVEF, plasma catecholamine (norepinephrine) concentration and oxidative stress parameters were evaluated at baseline and after 6 months of treatment with carvedilol. Results. Mean age was 59 (2) years, and 23 patients were men. After 6 months of treatment there were clinical improvements as measured by the Mahler score (from 6.8 to 11.0 point