International Conference on ADVANCED PHARMACY AND CLINICAL RESEARCH

February 07-08, 2022 | Webinar

eCarvedilol in Patients with Acutely Decompensated Systolic Heart Failure: Effects on Survival

Jose Hipolito Donis Hernández

Social Security Institute, Venezuela

Ninety-eight patients with acutely decompensated systolic heart failure were admitted to the Hospital Universitario de Los Andes between 2005 and 2011, in Mérida, Venezuela. Medical Treatment: Protocol 1: Furosemide 20 mg IV every 8 hours (28 patients). Protocol 2: Furosemide 20 IV every 24 hours plus cautious uptitration of carvedilol (70 patients). Heart rate decreased from 99.19 ± 12.38 to 67.64 ± 11.27 (bpm) (p < 0.0001) with protocol 2. Daily weight changes were similar both protocols. Mean maximum dose of carvedilol was 59.37 mg, furosemide 240 mg for protocol 1 and 80 mg for protocol 2. For the whole group of patients, survival probability was close to 60% at fifty months of follow up. There were fourteen deaths with protocol 1 and eleven with protocol 2. Survival probability was significantly higher, in patients assigned to protocol 1 (72% vs 38%, p< 0.046). Cox multiple regression analysis indicated that, medical treatment with carvedilol, was significantly and independently associated to survival, only in those patients who were in sinus rhythm. Cautious uptitration of carvedilol, in still decompensated patients with sinus rhythm, increases long term survival.

Introduction: The natural history of patients with chronic systolic heart failure is characterized by the recurrence of congestive signs and symptoms [1] These episodes, of acutely decompensated heart failure, appear within one hundred days to six months post-discharge and are associated to diminished survival [2, 3]. The onset of decompensation is usually gradual, fluid overload predominates over decreased tissue perfusion [4-8] and there is biochemical evidence of neurohormonal activation [9, 10] and myocytolisis [11]. The results of current therapeutic strategies, based on frequent and high doses of diuretics, increase morbidity and mortality [12-15]. Although, its use is still controversial, in hypervolemic uncompensated patients [16, 17], a cardioprotective strategy with beta-adrenergic blockers appears to improve survival [18, 19]. Beta blockers are contraindicated in patients with acutely decompensated heart failure. Current therapeutic strategies; have of diuretics and cautious uptitration of carvedilol. Our results indicate that, although clinical compensation is achieved with both strategies; the effects on neurohormonal activation and ventricular arrhythmias are opposite and we previously reported the short-term effects of these two opposite strategies, Consequently, selected patients with acutely decompensated heart failure can be compensated heart failure and the short-term effects of these two opposite strategies.

Biography

Jose Hipolito Donis Hernández was studied at Social Security Institute, in Mérida, Venezuela