

Improved outcomes after cardiac resynchronization therapy can be reached by multiprofessional evaluation

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Background: Cardiac resynchronization therapy (CRT) has been shown to reduce morbidity and mortality in selected patients with systolic heart failure (HF). However, efforts have been made to correctly identify the patients who benefit most from this therapy. The evaluation of a multiprofessional team for CRT candidates can contribute to improvement of outcomes.

Methods: Prospective cohort performed started on may 2017 until setember 2019. including patients with HF with left ventricular ejection fraction (LVEF) of less than 35% and with indication for CRT. Clinical and demographic data were collected to search for predictors for the combined outcome of death or hospitalization for HF at one year after CRT implantation. Patients were evaluated before implantation of the device by a multidisciplinary team that analyzed 21 predictors (5 social and 16 clinical) for an unfavorable outcome (maximum score of 21). Social predictors included medication adherence, per capita family income, psychological assessment and education level. All cause mortality was evaluatef 1-year after CRT implantation.

Results: 119 patients were evaluated, 69 (58%) were male, age 58.3 (+-12.2), with an average LVEF of 24.1 (+-8.5), 1-year Maggic score of 17.9 (+-11.6). Idiopathic cardiomyopathy was the most prevalent cause of HF 40 (34.2%), followed by Chagas disease 35 (29.9%) and ischemic etiology 17 (14.5%). 1-year all cause mortality was 35 (29.4%). The patients who died had, on average, higher scores in the multiprofessional assessment: 5.9 (+-3.8) vs 3.7 (+-2.7), $p = 0.002$. Mortality in 1 year in patients with 4 or more points in the multiprofessional assessment was 26 (44.1%) vs 9 (15.0%), $p = 0.001$.

Conclusion: The use of a multiprofessional team to evaluate patients who are candidates for CRT, using social and clinical tools, can help to correctly identify the patients who can benefit most from the therapy.