Abstract: P294

Ventricular function recovery in chronic heart failure patients

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BACKGROUND: Recently, interest in patients with ventricular function recovery has emerged. Data on these patients is scarce, namely concerning the understanding of the phenomenon, its frequency and its natural history. We aimed to characterize the prevalence and characteristics of patients with ejection fraction recovery followed in a Heart Failure (HF) clinic.

METHODS: We analysed patients included and followed in our HF clinic from 2002 to 2015 who had 2 echocardiograms performed during the follow-up period. A total of 334 patients had at least mild left ventricular dysfunction and an echocardiographic re-evaluation. From these, 30 patients were excluded because an intervention (revascularization or surgical valve correction) was performed between image evaluations. Partial recovery was considered when patients presented ejection fraction recovery without attaining ejection fraction of at least 50% and total recovery was considered when patients reached a normal ejection fraction (left ventricle ejection fraction = 50%).

RESULTS: In our population we observe that 150 (49.3%) of the patients showed no ejection fraction recovery or even worsening; 55 (18.1%) had a partial recovery and 99 (32.6%) showed total recovery of left ventricular function. A median time of 34 months was observed between echocardiogram evaluations. Mean patients' age was 66 years and 71.1% were men. Patients had a high comorbidity burden (35.9% were diabetic, 55.9% hypertensive, 55.9% had dyslipidemia and 36.2% were in atrial fibrillation); the aetiology was ischaemic in 35.5%. Patients were on optimally medical therapy: 95.1% were on Angiotensin Converting Enzyme inhibitor or Angiotensin Receptor Blocker, 98% on beta blocker, 53.9% on mineralocorticoid receptor antagonist. Non-recovered patients were mostly men (80.7% against 61.8 in partially and 61.6% in fully recovered patients, p=0.001) with ischemic HF (46.0% against 32.5% in partially and 21.2% in fully recovered patients, p<0.001). Comorbidity burden, New York Heart Association class upon admission and evidence-based therapy were not different between the groups of patients. CONCLUSIONS: In this chronic HF cohort, half of the patients with HF and reduced ejection fraction showed no systolic function recovery despite optimal medical treatment; one third of the patients presented ejection fraction recovery and around 20% presented partial recovery. Male with ischemic HF is the prototype of the non-recovered patient.