

CARDIAC FUNCTION AND HEART FAILURE

ANOTHER OBESITY PARADOX: OBESE PATIENTS WITH SYSTOLIC HEART FAILURE SHOW GREATER IMPROVEMENT IN LEFT VENTRICULAR EJECTION FRACTION

ACC Oral Contributions

Ernest N. Morial Convention Center, Room 243

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Background: Obese patients are at increased risk for developing systolic heart failure. However, studies have shown that obese patients with systolic heart failure have better long term survival (the obesity paradox). It is unclear if the improved survival in obese patients is due to improvement in left ventricular (LV) function. The aim of our study was to compare changes in LV systolic function measured by LV ejection fraction (LVEF) over time between obese and non-obese patients with systolic heart failure.

Methods: Consecutive patients (n=578) with newly documented LVEF \leq 0.35, who had at least one follow-up echocardiogram after \geq 3 months were included. Clinical and echocardiographic data were compared between obese (Body mass index [BMI] of \geq 30 kg/m²) (n=249) and non-obese patients (n=329). Incidence of LV reverse remodeling (defined as increase in LVEF to $>$ 0.35) was also compared between the groups.

Results: Obese patients were younger, more likely to have diabetes and to be on beta blockers. Mean EF at follow-up was significantly and consistently higher in obese patients (See Figure). Multivariate analysis showed that obesity was an independent predictor for LV reverse remodeling (OR 1.77, 95% CI 1.23-2.53, p 0.019).

Conclusions: Obese patients are more likely to improve their LVEF compared to non-obese patients. Importantly, obese patients are almost twice as likely to undergo LV reverse remodeling and therefore may be less likely to need an ICD for primary prevention of sudden cardiac death.

