

Long Term Clinical Outcome of Heart Failure and Preserved Left Ventricular Function

*Gotsman, I; Zwas, D; Admon, D; Lotan, C; Keren, A
Hadassah University Hospital, Jerusalem, Israel*

Background: Patients with heart failure (HF) have a poor prognosis. The proportion of patients with HF and preserved left ventricular function (LVF) is increasing. The long term prognosis of HF with preserved LVF may not be so benign. **Objectives:** To evaluate the long term clinical outcome of patients with HF and preserved LVF compared to patients with reduced function.

Methods: We prospectively evaluated 362 consecutive patients hospitalized with a definite clinical diagnosis of HF based on typical symptoms and signs. They were divided into two subsets based on echocardiographic LVF. Patients were followed for a mean of 6.5 years for clinical outcome.

Results: More than a third (36%) of the patients had preserved systolic LVF. These patients were more likely to be older, female and have less ischemic heart disease. The long term survival rate in this group was poor and not significantly different from patients with reduced LVF (28% vs 23% respectively, $P=0.2$). The adjusted survival rate by Cox regression analysis was also not significantly different ($P=0.15$). The event free survival from death or heart failure re-hospitalization was also low in both groups and not significantly different between patients with preserved vs. reduced LVF (12% vs. 10% respectively, $P=0.2$). Independent predictors of mortality in patients with preserved LVF were age, functional capacity, serum sodium and hemoglobin levels. Intraventricular septal thickness was also a strong independent predictor of survival in these patients; $IVS > 1.1$ cm (HR 3.21, 95% CI 1.55-6.65, $P=0.002$).

Conclusions: The long term clinical prognosis of patients with clinical heart failure with or without preserved LVF is poor and not significantly different.