

**Reverse Remodeling In DCM: Preliminary Report***Arad, M<sup>1</sup>; Nussbaum, T<sup>2</sup>; Feinberg, M<sup>2</sup>; Shechter, M<sup>1</sup>; Freimark, D<sup>1</sup>**<sup>1</sup>Heart Institute, Tel Hashomer, Israel; <sup>2</sup>Sheba Hospital, Tel Hashomer, Israel*

Contemporary heart failure therapies improve the prognosis and may even recover the left ventricular (LV) function in some patients. We examined the prevalence, the clinical features and therapies associated with reverse LV remodeling (RR) in a large cohort with nonischemic dilated cardiomyopathy (DCM). Detailed clinical data and echo-doppler follow-up (at least 6 months apart, mean 32±24) were available in 187 patients comprising 80% of our DCM registry. RR was defined as an increase in the LV ejection fraction (EF) by at least 10% units and a decrease in the LV end diastolic dimension (EDD) by at least 10%. RR occurred in 26% of the patients. RR was accompanied by a significant reduction in the LV end systolic dimension (49±9 to 34±8 mm,  $p<0.001$ ), improvement in the diastolic function, mitral and tricuspid regurgitation, and normalization of pulmonary artery pressure (39±10 to 30±6,  $p<0.001$ ). Among the others, 27% improved their EF but not their LV dimensions. NYHA functional class improved in RR group (2.5±0.8 to 1.7±0.8,  $p<0.001$ ) but did not change in 'noRR'. RR was uncommon in patients with familial DCM ( $p<0.01$ ) and in those with an intra-ventricular conduction defect on ECG ( $p<0.05$ ). It was more prevalent with prior exposure to chemotherapy ( $p=0.06$ ) and in patients who presented with congestive failure symptoms like dyspnea or edema ( $p<0.05$ ). Evidence based drug therapies and cardiac resynchronization (15% in RR vs. 9% in 'noRR',  $p=0.24$ ) were not associated with RR in this cohort. Over a mean follow up of 23 months, 20 patients from the 'noRR' group died or underwent heart transplantation as compared to none from the RR group ( $p<0.01$ ). We conclude that a considerable proportion of DCM patients are expected to improve with contemporary therapies. Close observation is recommended prior to committing to surgical or device implant interventions. Further study is needed to identify the patients expected to undergo RR and to define their long-term prognosis.