CHARACTERIZATION AND LONG-TERM OUTCOME OF HYPERTENSIVE DILATED CARDIOMYOPATHY:
A DISTINCT PHENOTYPE OF HYPERTENSIVE HEART DISEASE?

Poster Contributions
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Aims: Systemic hypertension (SH) as isolated etiological factor of left ventricular (LV) systolic dysfunction is not widely studied. This syndrome can be defined HDCM. Aim of the study was to determine prevalence and long-term outcome of hypertensive dilated cardiomyopathy (HDCM).

Methods and Results: We analyzed patients with SH (> 160/100 mmHg) and depressed left ventricular ejection fraction (LVEF) (<50%) referred to our Center from 2000 to 2009. Patients with coronary artery disease and other triggers of cardiac disease were excluded. HDCM patients were compared with a cohort of patients with idiopathic dilated cardiomyopathy (IDCM). 1971 out of 25188 patients (7.8%) had both SH and LVEF <50%. 114 (5.6%) were classified as HDCM (89% males, mean age 62±11 years, 25% NYHA III-IV, LVEF 31±9%, indexed LV end-diastolic diameter 3.32±0.4 cm/m2). At 9 months of follow-up, HDCM patients significantly improved (5% NHYA III-IV, LVEF 44±11%, LVEF increase >10 units in 50% of patients). Compared to IDCM, HDCM patients were older and had a higher prevalence of co-morbidities. At multivariable Cox model LVEF (HR for 10 point decrease: 1.7, 95% CI 1.2-2.5, p= 0.02), the co-morbidity score (HR for the presence of 1 more co-morbidity 1.96, 95% CI 1.2-3.3, p= 0.01) and IDCM vs HDCM (HR 3.9, 95% CI 1.1-12, p=0.04) were associated to higher rates of cardiovascular death/heart transplantation during a mean follow-up of 58±30 months.

Conclusions: HDCM represents a distinct phenotype of HF syndrome, and showed a more benign long term prognosis when compared with IDCM.