

**P241****Improvement in diastolic function and functional class of heart failure with preserved ejection fraction in hypertensive patients: ramipril vs eprosartan**

Moldavian Academy of Sciences, Institute of Cardiology, Chisinau, Moldova N Nadejda Sapojnic<sup>1</sup>; LF Popescu<sup>1</sup>; AP Caraus<sup>1</sup>

<sup>1</sup>Institute of Cardiology, Hypertension, Chisinau, Moldova, Republic of

**Purpose:** To compare the effect of long-lasting therapy with Ramipril and Eprosartan on diastolic dysfunction (DD) and functional class of heart failure (HF) in hypertensive phenotype of HF with preserved ejection fraction (HFpEF)

**Methods:** The study enrolled 101 patients with essential hypertension (49,5% men; mean age 50,11 ± 0,79 years) with left ventricular hypertrophy (LVH), DD and preserved ejection fraction (EF>50%). Functional class of HF was evaluated on the basis of a six minute walk test (6MWT). All patients were randomly assigned to treatment with Ramipril (R-gr; n = 56, mean dose=15,3mg±1,2 mg/daily) or Eprosartan (E-gr; n = 45, mean dose=850 ± 12,4 mg/daily), associated to diuretic (Indapamid 1.5 mg/daily). Ambulatory blood pressure monitoring (ABPM), transthoracic echocardiography (TE), and 6MWT were performed at baseline and after 6-, and 12-months of treatment.

**Results:** Compared to the baseline, there was a statistical improvement in diastolic function after 6 months of treatment in both groups, and this tendency was even more evident at the end of the study: only 20 patients (35,71%) in R-gr and 2 patients (4,44%) in E-gr presented delayed relaxation(DR), (p < 0,001) vs 53 patients (94,64%) in R-gr and 43 patients (95,56%) in E-gr,(p > 0,05) at the beginning of study. At baseline, pseudonormal filling (PsnF) was registered in 3 patients (5,36%) in R-gr and 2 patients (4,44%) in E-gr (p > 0,05),but no patients showed this pattern after 12 months of follow-up period. At this time, normal diastolic filling (NDF) has been noticed in 36 patients (64,29%) in R-gr vs 43 patients (95,56%) in E-gr, (p < 0,001). According to baseline functional disturbances during 6MWT, patients were categorized in functional class of HF (NYHA) as follows: II NYHA-60,7% patients (pts), III NYHA-39,3% pts in R-gr vs 60,00% and 40,00%, respectively, in E-gr (p > 0,05).At 12- month of follow-up examination, 31,5% pts showed I NYHA, 54%-II NYHA, and 14,4%- III NYHA in R-gr vs 42,3%, 49% and 8,6% respectively, in E-gr (p < 0,001).

**Conclusion:** Both drug-regiment with Ramipril and Eprosartan have shown beneficial effect on diastolic dysfunction and have improved the functional class of heart failure in hypertensive patients, but these improvements were significantly greater in the Eprosartan group.