

P1866**Influence of long-lasting treatment with ramipril and eprosartan on diastolic dysfunction and insulin resistance**

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Hypertensive heart disease (HHD) is a hallmark of target organ damages (TOD) in hypertension (HT) and often coexist with insulin resistance (IR). This "satellite conditions" determines reciprocal enhancement on TOD. Pharmacotherapy should aim both HHD and IR and RAAS inhibitors will be of peculiar utility in such conditions.

Methods: 101 hypertensives with HHD (LVH and DD) and IR 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). Ambulatory blood pressure monitoring (ABPM), transthoracic echocardiography (TE), and HOMAIR were performed at baseline and after 6, 12-months period. Assessment of diastolic function comprised: left atrium (LA) vol index, isovolumetric relaxation time (IRVT), deceleration time (DT), E/A ratio, E/e' ratio. The threshold value for IR (HOMAIR) was considered >2.5.

Results: At baseline, group did not differ statistically with respect to clinic and hemodynamic status (Fig.1). Both therapeutic regimens have gradually improved indices of DD, as well as HOMA-IR values (p < 0.001), but with greater reduction in E-gr (p < 0.001) (Tab.2). To note, at the end of the study significantly decreased the number of patients with pathologic mitral filling patterns with switching to physiologic one in both studied arms but with superiority in E-gr (95.56% subjects in E-gr vs 64.29% in R-gr, p < 0.001) (Tab.2).

Conclusion: The findings showed that both ACEI Ramipril and ARB Eprosartan progressively improve compromised diastolic function and insulin resistance, but with greater efficiency in the Eprosartan-medicated arm, probably due to additional sympatholytic effect of its moiety.

<i>Variables</i>	<i>Ramipril gr (56 pts)</i>	<i>Eprosartan gr (45 pts)</i>	<i>p</i>
<i>Age (yrs)</i>	50.11±0.79	52.04±0.63	<i>p>0.05</i>
<i>History of HT (months)</i>	13.00±1.95	13.41±2.01	
<i>Gender (M)</i>	29 (51.79%)	20 (44.44%)	
<i>SBP (mmHg)</i>	201.31±7.41	203.61±7.84	
<i>DBP (mmHg)</i>	106.25±5.54	107.17±6.02	
<i>HR (bpm)</i>	74.5±5.39	74.33±5.34	
<i>BMI (kg/m²)</i>	29.35±0.31	29.41±0.21	
<i>HOMA-IR</i>	3.34±0.09	3.38±0.08	
<i>LV remodelling</i>			
<i>LVMI (g/m²)</i>	140.42±15.54	148.76±10.93	
<i>RWT</i>	0.44±0.06	0.45±0.06	

Fig.1 Baseline characteristics of groups

Baseline characteristics of groups