P.090: ARTERIAL STIFFNESS AND ITS RELATION TO ENDOTHELIAL AND MICROCIRCULATORY FUNCTIONS IN HEALTHY MALES


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to controls. Therefore, a low EF, an important prognostic determinant, is not (P<0.001) or even inversely (central PP, AIx) represented by these measures of arterial function. When they are used for risk stratification, knowledge of systolic function is required as well.

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INTENSIVE MEDICAL THERAPY NORMALISES FLOW-MEDIATED VASODILATATION AND INTIMA-MEDIA THICKNESS OF PATIENTS WITH COEXISTING HEART FAILURE AND DIABETES

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Coexistence of heart failure (HF) and type 2 diabetes is associated with high cardiovascular mortality. Intensive medical treatment of HF patients with diabetes may reduce the endothelial dysfunction and the accelerated atherosclerotic process seen in these patients.

To study this, we investigated the endothelial function and the presence of atherosclerosis measured by flow-mediated vasodilatation (FMD) and intima-media thickness (IMT) in intensively treated patients with coexisting HF and diabetes.

Methods: FMD of the brachial artery and IMT of the common carotid arteries were determined in 26 patients with HF and diabetes who were in intensive medical therapy as well as in 19 healthy controls. The two groups were matched according to age and sex. In all subjects left ventricular ejection fraction was measured by two-dimensional echocardiography (LVEF). Biochemical parameters including serum cholesterol, high and low density lipooprotein-cholesterol, triglyceride, glucose, hemoglobin/hemoglobin-A1c (HbA1c), brain natriuretic peptide (BNP) and N-terminal pro-BNP were also assessed.

Results: Mean FMD and IMT did not differ significantly between patients and controls. LVEF was lower in patients compared to controls (P = 0.001). The group of patients had a higher mean BNP, NT pro-BNP, triglyceride, HbA1c and glucose in comparison to controls. Cholesterol, HDL-cholesterol and LDL-cholesterol were lower in patients compared to controls.

Conclusions: Intensively treated patients with coexisting HF and diabetes seem to have normal endothelial function as measured by FMD and they have no sign of accelerated atherosclerosis as measured by IMT. This suggests a positive effect of medication on the cardiovascular alterations in this group of patients.