**G5**

**ATRIAL NATRIURETIC PEPTIDE AND LEFT VENTRICULAR HYPERTROPHY IN ESSENTIAL HYPERTENSION PATIENTS.** A. Kupolainaya, E. G. Voronii, A. S. Vasylenko. Institute of Cardiology, Kiev, Ukraine.

Aiming at investigation of the relation between the concentration of atrial natriuretic peptide (ANP) and left ventricular myocardial mass (LVMM) and diastolic dimensions (ADD) in pts with different blood concentrations of ANP: 1) relatively low (<15 pg/ml); 2) mean (15-24 pg/ml); 3) high (>25 pg/ml).

Plasma ANP concentration was estimated by radioimmuno method; EDD and LVMM - by echoCG. A tendency to LVMM rise being observed at ANP plasma concentration increase 1 gr. - 0.53±0.2; 2 gr. - 0.44±0.2; 3 gr. - 0.70±0.2; p<0.05. Correlative analysis showed that no relation between ANP concentration and EDD in pts groups with being and moderately elevated values is marked, it being distinct in pts with high ANP content (r=0.52; p<0.05). The data obtained demonstrate a causal relation between ANP secretion and LV cavity dimensions.

**Key Words:** atrial natriuretic peptide, left ventricle, myocardial mass, essential hypertension, hypertrophy.

**G7**

**DESFERRIOXAMINE BUT NOT L-ARGININE IMPROVES RESPONSES OF ANGIOGRAPHICALLY NORMAL CORONARY ARTERIES OF DIABETIC PATIENTS TO COLD PRESSOR TEST AND TO FLOW INCREASE.** A. Hillebrand, S. Ledoux, J. J. Attal, P. Valsenti. Hôpital Louis Mourier. INSERM U 426, CHU Xavier Bichat, Colombes, France.

Acetylcholine produces coronary artery (CA) constriction in diabetic patients suggesting an impairment of endothelium dependent dilation. To examine the mechanism of this abnormal response, 2 physiological tests, i.e. cold pressor test (CPT) and coronary flow-increase induced by 10 mg papaverine (PAP) injection in the distal left anterior descending CA (DLAD), were performed before and after either iv. L-arginine (L-arg) or iv. desferrioxamine (DF). No changes were recorded with DF in 18 normotensive nonsmoker diabetic persons with high ANP content (r=0.52; p<0.05) and to flow increase induced by PAP.

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**Conclusions:** 1) responses of angiographically normal CA to CPT and to flow in increase are impaired in diabetic patients; 2) no abnormal responses are not improved by L-arg suggesting that a deficit in substrate for NO synthesis is not involved; 3) DF restores a vasodilator response to the 2 tests suggesting that inactivation of NO by superoxide radicals might be partly responsible of the impairment of CA dilation in diabetic patients.

**Key Words:** Diabetics, Coronary arteries, Endothelium-dependent dilation, L-arginine, Desferrioxamine.

**G8**

**EFFECTS OF PRAVASTATIN ON THE EXAGGERATED BLOOD PRESSURE RESPONSE TO STRESS IN HYPERCHOLESTEROLEMICS.** M. Minami, K. Arakawa, A. Ishikawa, Y. Hira, A. Gotou, M. Omata. The 2nd Department of Internal Medicine, University of Tokyo, Tokyo, Japan.

We examined the relation between lipid abnormality and the regulation of blood pressure (BP) since impaired endothelium dependent vasodilation is observed in patients with hypercholesterolemia. Patients with normotensive hypercholesterolemia (HC: n=11, 50±3) and normal cholesterol, dimensions of the proximal LAD (pLAD) were measured by quantitative angiography.

**Conclusions:** Severe hypertension treated with Enalapril + Hydrochlorothiazide, suggesting a improvement of endothelium-dependent vasodilation.

**Key Words:** L-arginine, Enalapril, Hydrochlorothiazide.