

Coronary Bed Lesion, Aldosterone, and Brain Natriuretic Peptide Plasma Levels in Ischemic Heart Disease Patients with Various Left Ventricular Myocardial Mass

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To study the character of coronary bed lesion in connection with aldosterone (Ald) and brain natriuretic peptide (NT-proBNP) plasma levels in ischemic heart disease (IHD) patients, 232 men with stable angina pectoris were investigated. 1st group included 117 pts 53,1±6,2 years old with left ventricular myocardial mass index (LVMMI) had been within normal range (<125 g/m²; M ±m - 114,1±1,8 g/m²), 2nd group included 115 pts 55,5±5,0 years old with left ventricular hypertrophy (LVH; LVMMI>125 g/m²; M ±m - 162,1±4,6 g/m², p<0,005). IHD duration had been 3,3±0,5, and 3,7±0,6 years, correspondingly. 58,1% pts 1st group, and 50,9% pts 2nd group had previously myocardial infarction. In addition to conventional clinical, laboratory and instrumental examinations, a coronarography (CG), and determinations of aldosterone and NT-proBNP plasma levels had been carried out. 2nd group pts demonstrated significantly higher plasma Nt-proBNP levels (9,9±1,2 pg/mL vs 5,4 ±1,7pg/mL in 1st group; normal range 0 - 200 pg/mL, p<0,05). Plasma aldosterone concentrations was insignificantly higher also in 2nd group. Intact coronary arteries had been found more frequently in pts with normal LVMMI. Clinically significant coronary arteries lesion had been found both in 1st (81,1%), and 2nd (95,9%) group pts. Also in LVH pts more frequently has been found significant lesion of three and more vessels. Left main stem as well as other main arteries had been found more frequently in 2nd group pts. Our data had revealed a close relationship between plasma concentration of NT-proBNP and increased myocardial mass index, therefore NT-proBNP may be used as informative criteria in assessment of morphologic and functional status of a heart. Plasma concentrations of aldosterone had been within normal range and not differed significantly between normal LVMMI and LVH pts. Three and more coronary arteries lesions as well as main arteries strikes had been found more frequently in LVH pts too.