**IMMUNOINFLAMMATION MARKERS IN HYPERTENSIVE WOMEN IN DEPENDENCE ON A TYPE OF A LEFT VENTRICULAR REMODELLING**

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Goal: to determine the activity of immunoinflammation markers in hypertensive women in relation to structural and functional changes of left ventricle (LV)

Methods. 153 hypertensive women aged from 30 to 79 years underwent a complex clinical examination. Due to left ventricular geometry (Ganau classification) patients were divided into 4 groups: group 1 contained 8 women with normal LV geometry (NLVG), group 2 - 18 patients with concentric LV remodelling (CLVR), group 3 - 67 females with concentric LV hypertrophy (CLVH), group 4 - 60 women with eccentric LV hypertrophy (ELVH). Concentrations of C-reactive protein (CRP), proinflammatory cytokines (TNF-α, IL-6), antiinflammatory cytokine (IL-4) have been detected by immunoenzyme assay.

Results. Concentrations of TNF-α averaged 46,17±2,76 pg/l in women in group 1; 47,83±2,25 pg/l - in those in group 2; 49,46±2,58 pg/l - in females belonged to group 3; 46,68±2,55 pg/l - in group 4 respectively and were not significantly distinctive (р>0,05), but its highest level was in group 3. The highest average IL-6 level was determined in group 3 (7,51±0,58 pg/l); although it did not differ significantly from those in groups 2 and 4 (5,63±0,55 pg/l and 6,78±0,39 pg/l respectively, р>0,05 for both), it was proven to be markedly higher compared to that in group 1 (4,93±0,79 pg/l, р<0,01). Average CRP concentration was the highest in women with CLVH and substantially exceeded the same marker in patients with NLVG (4,04±0,71 mg/l and 2,82±0,28 mg/l respectively, р<0,05), at the same time this elevation was not distinctive compared with CRP values in patients with CLVR and ELVG (3,57±0,25 mg/l and 3,1±0,59 mg/l respectively, р>0,05 for both). Females with CLVH showed the highest average IL-4 concentration that only slightly exceeded IL-4 values in patients with CLVR and ELVH (34,05±2,05 pg/l, 29,99±1,36 pg/l, 31,54±2,93 pg/l respectively, р>0,05) whereas it was significantly higher compared to that in women with NLVG (27,52±2,41 pg/l, р<0,05).

Conclusions. In hypertensive women the highest levels of TNF-α, IL-6, CRP and IL-4 strongly correlated with a CLVH development.