**LEVEL OF TNF-α, sTNF-RI AND 8-ISOPROSTANE IN THE**

 **COMBINED THERAPY OF BISOPROLOL AND INDAPAMID AT OVERWEIGHT HYPERTENSIVE PATIENTS**

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One of the manifestations of the pathogenesis of such combined pathology as hypertension (AH) and obesity is the development of endothelial dysfunction (ED). Recent studies suggest a possible role of immune-inflammation activation mediated by pro-inflammatory cytokines, and oxidative stress (OS) in the development of ED.

**Aim.** Assessment of the level of TNF-α, sTNF-RI and 8-isoprostane, as the main marker of OS, at overweight patients with arterial hypertension in combined bisoprolol (5 and 10 mg) and indapamid (2,5 mg) therapy.

**Material and methods.** The content of serum 8-iso-PgF2α (8-isoprostane n=10), TNF-α and its soluble receptor type I (sTNF-RI n=102 ) were determined by ELISA. The obtained data were expressed in pg/mL, ug/ml and ng/ml respectively. Overweight hypertensive patients, (2–stage, 2-3 degree of AH, age–54,7+0,58 years), without preliminarily antihypertensive therapy were examined.

The TNF-α level was decreased to 70,46 (44,75±8,21 compared with base line before treatment 115,21±19,61 p<0,05) which is 61,16%. Middle level sTNF-RI noted a reverse trend, ie increase its average 0,24 (11,06%) after the treatment (2,41±0,03 with before treatment 2,17±0,12). The decrease in TNF-α / sTNF-RI 65% (18,57 vs 53,09) indicates a change of ligand / receptor ratio on, ie the reduction of TNF-α on the background of sTNF-RI shows a significant decrease in the level of immunoactivation after 10 weeks of treatment by β-adrenoblocker (bisoprolol) with diuretic (indapamid ).

Decreased content of serum 8-isoprostane was observed on 40,0% (12,3±7,27 compared to baseline 20,49±17,36) and respectively 1,66 times becomes lower.

**Conclusions.** Bisoprolol treatment in combination with indapamid is accompanied by a decrease in intensity of oxidative stress, which manifests a decrease in the level of 8-isoprostane and evidence of antiimmunoinflammatory and antiapoptotic effects during therapy.