



## THE EFFECTIVENESS OF BISOPROLOL IN PATIENTS WITH RHEUMATIC HEART DISEASE WITH CHRONIC HEART FAILURE

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**Introduction.** Neurohormonal factors (an increase in the activity of the sympathetic-adrenal and renin-angiotensin systems, an increase in the production of aldosterone) and cytokines are involved in the pathogenesis of heart failure, causing various vasoconstrictor effects, which initially have a compensatory value, but then lead to the hemodynamic overload of the heart. The effect on these mechanisms (neurohormonal and immunological unloading) is possible with the appointment of beta-blockers, ACE inhibitors, as well as veroshpiron.

**Purpose.** To study the effect of bisoprolol on immunological parameters and quality of life in patients with rheumatic heart defects complicated by CHF.

**Materials and methods:** The study included 96 patients with mitral and aortic heart defects with a predominance of rheumatic etiology stenosis, complicated by CHF of functional classes II-III (FC) at the age of 18-64 years. The patients were randomized into two groups. The first group included 48 patients who received bisoprolol in addition to standard therapy. Immunological parameters of tumor necrosis factor-alpha (TNF-alpha) and interleukin-6 (proinflammatory cytokines) were determined by solid-phase enzyme immunoassay according to the standard method. The quality of life was assessed according to the Minnesota questionnaire "Life with heart failure.

**Results.** After 3 months of treatment, the first group showed a decrease in proinflammatory cytokines TNF-alpha by 22.6%, interleukin-6 by 25.3%. In the second group, TNF-alpha decreased by 15.8%, interleukin-6 decreased by 18.1%. There were improvements in the clinical condition and quality of life, an increase in exercise tolerance. Bisoprolol is an effective drug for the treatment of rheumatic heart defects complicated by CHF II-III FC, having a beneficial effect on immunological parameters (reducing the amount of pro-inflammatory cytokines) and improving the quality of life.