



indicators of quality of life turned out to be inert to valsartan therapy show less positive dynamics.

Conclusions. Thus, it can be argued that therapy with valsartan in patients with coronary artery disease and type 2 diabetes mellitus reliably positively affects the quality of life in such patients, increasing largely role-based physical functioning, and the least effect is demonstrated on the mental health of patients. Such results give reason to consider valsartan a drug of choice for patients with coronary artery disease and type 2 diabetes mellitus.

CHANGES IN FIBROSIS MARKERS DEPENDING ON THE LEVEL OF GLOMERULAR FILTRATION RATE IN PATIENTS WITH CARDIORENAL SYNDROME TYPE 2 ON THE BACKGROUND OF CHRONIC HEART FAILURE AND COMBINED TYPE 2 DIABETES MELLITUS

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Introduction. Chronic heart failure (CHF) is one of the most common complications of cardiovascular disease. It is known that CHF affects various organs and tissues, which leads to a violation of their functions, sometimes so significant that it becomes the direct cause of death. One such target organ is the kidney. Bilateral heart-kidney relationship, in which a pathophysiological disorder in one of them can lead to dysfunction of the other, is defined by the concept of "cardiorenal syndrome" (CRS).

Goal. The aim of the study was to analyze changes in monocyte chemo attractant protein-1 as a marker of fibrosis and matrix metalloproteinase-9 as an indicator of fibrolysis in patients with type 2 cardiorenal syndrome on the background of chronic heart failure and type 2 diabetes depending on the level of glomerular filtration rate.

Materials. In patients with bovine type 2 on the background of CHF and type 2 diabetes found significant no increase in the concentration of MCP-1 in the presence of GFR > 60 ml / min, and in the presence of GFR < 59 ml / min when compared with patients without type 2 diabetes. The data obtained show that growth of signs of renal dysfunction is accompanied by excessive activity of fi-

brotic factor MCP-1, which is more pronounced when reducing GFR < 59 ml / min. In patients with cattle type 2 on the background of CHF and type 2 diabetes with a GFR level > 60 ml / min the presence of GFR < 59 ml / min revealed a significant increase in MMP-9 compared with patients without type 2 diabetes. However, a comparison of MMP-9 levels in patients with GFR levels > 60 ml / min, and in the presence of GFR < 59 ml / min among themselves showed a tendency to increase, which is not reaches the level of probability ($p < 0,05$). Further increase in renal dysfunction is characterized by is characterized by a proportional increase in MCP-1 in the absence of such in MMP-9 that indicates an imbalance of fibrosis and fibrolysis at GFR < 59 ml / min

Results. Progression in patients with type 2 cardiorenal syndrome on the background of chronic heart failure and type 2 diabetes is associated with an increase in the fibrotic marker monocyte chemo-attractant protein-1, which indicates its participation in tubulointerstitial kidney disease. High levels of metalloproteinase-9 in patients with



cardiorenal syndrome type 2 on the background of chronic heart failure and type 2 diabetes in the presence on the level of glomerular filtration > 60 ml / min, suggests the involvement of adaptive compensatory mechanisms at this stage, aimed at leveling fibrotic aggression. Reduction on the level of glomerular filtration < 59 ml / min is not accompanied by a further increase in the activity of antifibrotic factor, which under conditions of hyperactivity chemo-attractant protein-1 indicates the depletion of adaptation mechanisms, resulting in the launch of a cascade of reactions to the progression of interstitial sclerosis.