

RELATIONSHIP BETWEEN THE PRESENCE OF ATRIAL FIBRILLATION AND CHRONIC KIDNEY DISEASE IN PATIENTS WITH CORONARY HEART DISEASE

K. Perepelytsia, Y. Kushnir

Atrial fibrillation (AF) is the most common sustained cardiac arrhythmia. The presence of chronic kidney disease (CKD) increases the risk of incident AF, as well as AF increases the risk of CKD progression. The purpose of the study was to estimate the relationship between the presence of atrial fibrillation and CKD in patients with coronary heart disease.

: A retrospective analysis of 312 case histories of patients with coronary heart disease who undergo inpatient treatment, aged from 39 to 88 years, have been conducted. Depending on the presence of AF, all patients were divided into 2 groups: group 1 (main) – patients with coronary heart disease with AF (n=145), group 2 (comparison) – patients with ischemic heart disease without AF (n=167). From all patients were collected anamnestic data, physical and laboratory-instrumental tests. To evaluate the renal function the level of creatinine was determined and glomerular filtration rate (GFR) was calculated by CKD-EPI formula. Statistical processing of the results was performed using the STATISTICA 6.1 software package. Analyzing results was estimated that 289 pts (92.6%) with coronary heart disease had decreased renal function. In the group of patients without AF, the proportion of persons with decreased renal function was 86.8 (p<0,05). The average GFR in the first group was - $64,0 \pm 11,7$; in the second - $82,2 \pm 12,7$ (p<0,05). CKD was found in 42.7% (62 pts) of the first group and 28.7; By rank correlation analysis, direct weak correlations were detected between AF and CKD ($r=0.21$; p=0.002).

All patients with coronary heart disease have a high level of incidence of renal dysfunction. The presence of atrial fibrillation in patients with coronary heart disease is associated with lower level of GFR and higher level of CKD frequency.