

CNS was meningitis, with 135 cases (51.5% of all serous lesions of the CNS), while meningoencephalitis was seen in 113 cases (43.1%). Encephalitis was noted in 10 cases (3.8%), cerebellitis in 2 cases (0.8%), and meningoradiculoneuritis and meningoencephalopolyradiculoneuritis in 1 case each (0.8%).

The predominant role among aseptic neuroinfections was the Tick-borne encephalitis virus, endemic to the Grodno region, and neuroinfections of enteroviral etiology. 36.6% of cases were unverified CNS lesions underscoring the necessity to develop an optimal algorithm for the laboratory examination of patients with CNS infections.

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CLINICAL AND ANAMNESTIC FEATURES OF CHRONIC HEART FAILURE DEPENDING ON THE LEFT VENTRICULAR EJECTION FRACTION

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Introduction. Left ventricular ejection fraction (LVEF) is the measure of volume ejected in systole phase (stroke volume), which an important clinical marker is used for diagnosis, classification and management of heart failure (HF) over decades [1]. HF is classified into HF with reduced ejection fraction (HFrEF) and HF with preserved ejection fraction (HFpEF). LVEF parameter has a high prognostic value in predicting complications in patients after revascularization, myocardial infarction (MI), and with congestive heart failure. Patients with reduced LVEF are often associated with greater adverse events including higher rates of CVDs, sudden cardiac death, while the patients with preserved LVEF are associated with abnormal diastolic function due to increased LV myocardial stiffness [2].

Aim of the study. To evaluate clinical and demographic features in patients with HFpEF in comparison with patients with HFrEF.

Materials and methods. The study included 111 patients with HF of NYHA functional classes I-III. 72 (59.72%) patients had a preserved LVEF ($\geq 50\%$) and 39 (40.28%) had reduced LVEF ($< 50\%$). The inclusion criteria were patients with HF diagnosed based on ESC (2021) guidelines [3], age > 18 years and agreement to participate in the study. The exclusion criteria were patients with congenital heart disease, primary valve disease, massive pericardial effusion, patients with acute coronary syndrome, or who had pacemakers. All patients underwent a comprehensive clinical examination, as well as standard echocardiography. Statistical analysis was performed using the STATISTICA 12.0 software.

Results and discussion. Patients with HFrEF and HFpEF were comparable in mean age (60.7 ± 11.9 vs 60.4 ± 10.7 years, $p=0.819$). Patients with HFrEF were predominantly male in comparison with HFpEF (33 (84.6%) vs 43 (59.7%), $p=0.013$, $\chi=6.15$). Patients of both groups were comparable in prevalence of coronary artery disease (CAD) (30 (76.9%) vs 66 (91.6%), $p=0.09$, $\chi=3.26$), symptoms of stable angina grade 2-3 (14 (35.9%) vs 26 (36.1%), $p=0.85$, $\chi=0.34$) as well as diabetes mellitus (7 (17.9%) vs 12 (16.7%), $p=0.91$, $\chi=0.073$).

Almost a half of patients with HFrEF had a history of myocardial infarction (MI) while in a group with HFpEF it was registered in less than a quarter of patients (17 (43.6%) vs 16 (22.2%), $p=0.032$, $\chi=4.55$). It is interesting to say that 6 (15.4) patients with HFrEF and only 1 (1.4%) patient with HFpEF had history of myocarditis ($p=0.012$, $\chi=6.18$). However patients with HFpEF more frequently had hypertension in comparison with HFrEF group (63 (87.5%) vs 26 (66.7%), $p=0.017$, $\chi=5.66$). It should be noted that 21 (53.8%) patient in HFrEF group and 62 (86.1%) patients in HFpEF group had a combination of hypertension and CAD ($p<0.001$, $\chi=12.3$).

Hypertension and CAD, as well as their combination (more than 50%), are the leading causes of chronic HF in Belarus, Europe and United States [1, 3]. This is also traced in our study.

Conclusion. The epidemiology and etiology of HFpEF has fundamental differences from HFrEF. HFpEF is more common in women and patients with hypertension, while HFrEF is more prevalent in male patients with a history of MI or myocarditis. Reliability of the obtained results should be further checked on larger samples of patients.

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