

GENDER DIFFERENCES IN PATIENTS WITH CHRONIC HEART FAILURE WITH REDUCED LEFT VENTRICULAR EJECTION FRACTION

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Introduction. This study investigates the gender differences in patients with heart failure and reduced left ventricular ejection fraction (HFrEF). Previous research has suggested that males and females may exhibit distinct clinical characteristics, responses to treatment and outcomes. Understanding these differences is crucial for tailoring effective management strategies and improving overall patient care in HFrEF.

Aim of the study. To evaluate clinical and echocardiographic differences in male and female patients with chronic HFrEF

Materials and methods. The study included 85 patients with HF with reduced LVEF (<50%). Group 1 included 45 (52.9%) male patients, while group 2 consisted of 40 (47.1%) female patients. The inclusion criteria were patients with HFrEF diagnosed based on ESC (2021) guidelines, age>18 years and agreement to participate in the study. 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. Male patients with HFrEF were younger than females (65 [60; 73] vs 70 [66; 74] years, $p=0.013$). Patients of both groups were comparable in body mass index (30 [25; 33] vs 32 [27; 36], $p=0.503$), and almost a half of patients in each group had obesity (46.6% vs 47.5%, $p=0.939$). Also, patients of both groups were comparable in prevalence of coronary artery disease (38 (84.4%) vs 33 (82.5%), $p=0.81$), as well as hypertension (40 (88.9%) vs 31 (77.5%), $p=0.258$) and diabetes mellitus (9 (20%) vs 7 (17.5%), $p=0.58$). Female patients were more likely to have anemia (11 (27.5%) vs 4 (8.9%), $p=0.025$). Male and female patients with HFrEF had no significant differences in the size of left atrium ($p=0.23$), right atrium ($p=0.47$) and LVEF (38 [34; 45] vs 37 [32; 44] %, $p=0.63$), however, males had larger both end-diastolic (207 [174; 220] vs 191 [152; 209] mm, $p=0.026$) and end-systolic volume of left ventricle (130 [95; 152] vs 115 [68; 137] mm, $p=0.027$).

Conclusion. Female patients with HFrEF were older and more prone to anemia, while both groups demonstrated high percent of comorbidities such as obesity and diabetes. There were no significant intergroup differences in echocardiographic parameters, except for the volumes of left ventricle ($p<0.05$).