

The objective of the current study was to assess the incidence and clinical features of the frailty syndrome in patients with rheumatoid arthritis (RA) as well as the role of cardiovascular disease (CVD) and cardiovascular risk factors.

Materials and methods. Our study included 101 patients (86 women and 15 men) aged 45–81 years with confirmed RA of 8 [3; 15] year duration. Frailty syndrome was diagnosed based on the phenotype of frailty developed by Fried LP, et al (2001). We performed electrocardiography (ECG), echocardiography (echo), assessed the risk of CV mortality according to the SCORE scale, CV risk factors, the Health Assessment Questionnaire-Disability Index (HAQ-DI) functional status, nutritional status, dementia screening and calculated Charlson Comorbidity Index.

Results. Of all the 101 patients with RA, 41 were frail (40.6%), 56 (55.4%) were prefrail and 4 were not frail (4.0%). Compared with prefrail patients, frail individuals were older ($p=0.002$) and had higher disease activity ($p=0.03$) and stage ($p=0.003$) of RA based on X-ray studies, were in more pain according to the visual analogue scale (VAS) ($p=0.001$) and had more limitations of their everyday activity according to HAQ-DI ($p=0.002$). In frail patients wrist dynamometry values ($p=0.001$) were lower and 4 m walking test time was higher ($p=0.004$) compared with prefrail. Frail patients were also more prone to unmotivated weight loss ($p<0.001$), fatigue ($p<0.001$) and lack of physical activity ($p<0.001$). However, they were at a lower risk of malnutrition ($p<0.001$). Frail patients with RA had higher prevalence of CVD (chronic heart failure, coronary artery disease) ($p=0.008$), and more pronounced left ventricular hypertrophy ($p=0.004$). Frail patients had higher 10-year cardiovascular mortality risk according to SCORE scale ($p=0.02$). The majority of these individuals were at a very high risk despite lower levels of total cholesterol compared with prefrail participants ($p=0.009$). Key cardiovascular risk factors in frail patients were older age, arterial hypertension, and lack of physical activity, in prefrail –hypertension and obesity.

Conclusion. The overall prevalence of frailty in patients with RA was 40.6%. It is associated with older age, more severe RA, disorders of nutritional status, more everyday life limitations, CVD, and high CV risk.