

Abstract

Cardiovascular (CV) diseases due to atherosclerosis are the leading cause of morbidity and mortality worldwide. CV risk in rheumatic patients is caused by both traditional and non-traditional risk factors associated with autoimmune diseases. Unlike the relatively more prevalent rheumatic disease, there is a lack of evidence on CV risk in rare rheumatic diseases.

The aim of this study was to evaluate the CV risk in 90 patients with idiopathic inflammatory myopathies (IIM), compared to 180 healthy controls (HC) with similar age and gender distribution, without clinically manifested CV diseases.

The results of this cross-sectional cohort study showed a significantly higher prevalence of traditional risk factors as well as of subclinical atherosclerosis in IIM compared to HC. In comparison to carotid ultrasonography, SCORE, SCORE2, and modified SCORE was proved to underestimate the CV risk, while SCORE2 appeared to be the most accurate. The most severe CV risk profile was observed in patients with statin-induced necrotizing myopathy. Overall, higher CV risk in IIM was associated with higher age, disease activity, body composition parameters, and higher blood pressure values.

We confirmed a higher CV risk as well as a higher prevalence of traditional risk factors in patients with IIM compared to the general population. Therefore, in the future, specific recommendations for CV risk management in IIM and other rare connective tissue diseases will be needed.