

ABSTRACT

Objective: To compare the prevalence of left ventricular (LV) diastolic dysfunction in subjects with and without rheumatoid arthritis (RA), among those with no history of heart diseases , and to determine the relation between diastolic dysfunction in RA and disease activity and duration.

Methods: Fifty rheumatoid arthritis patients diagnosed according to The 2010 American College of Rheumatology/ European League Against Rheumatism classification criteria for rheumatoid arthritis and 25 age and gender matched apparently healthy subjects were included.

All patients and the control groups were submitted to M-mode, two dimensional, Doppler (continuous and pulsed wave) echocardiography. Diastolic dysfunction is defined when transmitral flow (E/A ratio) < 1 (E wave velocity decreased, A wave velocity increased).

Results: Left ventricular diastolic dysfunction was found in 32% of RA patients and 8% of controls with (p value =0.049). In the group of patients a relation was found between diastolic dysfunction and duration of the disease (p =0.012), and disease activity assessed by DAS28 (p =0.006).

Conclusions: we concluded that RA patients, in absence of clinical evidence of heart disease, showed increased prevalence of LV diastolic dysfunction characterized by impaired E/A ratio. Diastolic dysfunction was more in patients with longer disease duration and patients with active disease. Screening for cardiac abnormalities should be considered in this kind of patients.

Keywords: Diastolic dysfunction, Rheumatoid arthritis, Echocardiography.

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