

Acute rheumatic fever in a 61-year-old patient

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Introduction. Acute rheumatic fever (ARF) is the leading cause of acquired valvular heart disease in developing countries¹. An ARF episode often occurs in children and young adults, especially from 4 to 15 years. Its most severe event is carditis, leading to chronic rheumatic heart disease (RHD).¹ The study and description of ARF in adults is scarce as its occurrence is rare over the age of 40 years old, what leads to few attention paid by the doctors to this diagnosis in older patients².

Objectives. The aim of this case report is to describe an ARF episode in a 61-year-old woman and raise awareness to this differential diagnosis for patients above the most common age of presentation, especially in developing countries where rheumatic fever has still a considerable incidence. Searching on PUBMED for the last 10 years, we have found only two cases presenting with ARF above sixty years old^{2,3}.

Case Report. A 61-year-old woman with a history of a previous ARF event 14 years ago was admitted in our hospital with a one-month history of retrosternal pain, dyspnea, orthopnea and nonproductive cough. She went to the emergency service when the symptoms began; a chest radiograph revealed signs of pulmonary congestion and a bilateral pleural effusion. The patient then received prescriptions of Furosemide and Carvedilol and was referred to our service. On physical examination, she presented normal vital signs, bilateral rales, a 3+/6 mitral systolic murmur and a gallop rhythm (S3). She was followed as an outpatient and had no murmur on previous examinations. She had no arthritis and no skin rashes. Laboratory data: NT-proBNP 1117 pg/mL, ASLO normal. A chest CT showed bilateral pleural effusion and interlobular septal thickening, compatible with pulmonary congestion; a small pericardial effusion was present. Doppler echocardiogram showed an ejection fraction of 39%, left atrium (LA) 44 mm, left ventricular (LV) diffuse hypokinesia, LV systolic diameter 54 mm, LV diastolic diameter 63 mm. Mitral valve presented mild thickening, points of calcification on its ring and reduced mobility on the posterior leaflet, with significant regurgitation and maximum and average diastolic gradient estimated respectively as 11,8 mmHg and 5,8 mmHg (previous echocardiogram from one year before had an ejection fraction of 57%, LA 35 mm, LV systolic diameter 34 mm, LV diastolic diameter 49 mm, no LV functional impairment or hypokinesia, mitral valve with minimal thickening, no calcification and minimal regurgitation). Cardiac magnetic resonance confirmed important left ventricular systolic dysfunction and enlargement, with severe mitral regurgitation (43% of the stroke volume). PET/CT with ¹⁸F-FDG was performed 24 h after specific diet to avoid physiological myocardial glucose uptake and showed a heterogeneously diffuse increased uptake of fluorodeoxyglucose in the left ventricular wall and papillary musculature, attributed to active rheumatic carditis. Gallium scintigraphy showed a positive study for active cardiac inflammatory process as well. We then suspended Carvedilol and introduced Prednisone, Enalapril, Spironolactone, Digoxin, Penicillin G plus fluid restriction, with the presumptive diagnosis of ARF. The patient presented rapid and significant clinical improvement on follow-up.

Keywords: Acute rheumatic fever; Idoso; Mulher.

References

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