

First Presentation of Rheumatic Fever in Preschool Egyptian Children Younger Than 5 Years

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OBJECTIVES: Rheumatic fever usually occurs in children between 5 to 15 years, less frequently in younger age. The aim of this study was to detect the frequency of first presentation rheumatic fever in ages less than 5 years and determining the pattern of presentation in this age group.

METHODS: This retrospective study was conducted on Egyptian children presenting to a specialized rheumatic fever clinic from March 2014 to March 2016. The data of children younger than 5 years presenting with proven rheumatic fever according to the modified Jones criteria were recorded. These data included demographic data, clinical presentations, laboratory findings and echocardiographic findings.

RESULTS: Out of 621 patients diagnosed with Proven rheumatic fever; 47 (7.5%) were younger than 5 years. Twenty six (55.3%) were females and twenty one (44.7%) were males. Positive family history was encountered in 13 patients (27.7%). Their most common presentations were arthritis in 36 (76.6%), carditis in 13 (27.7%) and chorea in only 1 patient (2.1%). Subclinical carditis was detected by echocardiography in 4 patients (8.5%). The most common valvular lesion encountered was mitral regurgitation in 16 (34%) followed by aortic regurgitation in 7 patients (14.9%). Both mitral and aortic regurgitation were present in 6 patients (12.8%). Rheumatic morphological changes in the mitral valve were encountered in 9 patients in the form of thickened mitral valve leaflets, thick subvalvular apparatus, restricted posterior mitral valve leaflets, lack of systolic coaptation and mitral valve prolapse where 8 out of 9 had 2 or more rheumatic mitral morphological changes while 1 patient had only 1 rheumatic mitral morphological change. Thickened aortic valve leaflets were encountered in 3 patients.

Conclusion: Acute rheumatic fever can occur in children younger than 5 years, thus the possibility of rheumatic fever should be adequately investigated in these young patients presenting with arthritis, carditis or chorea especially in developing countries like Egypt. Echocardiography is an essential tool to diagnose subclinical carditis which can influence the management strategy. Long-term follow-up is mandatory to determine the outcome for young children with subclinical echocardiographic evidence of carditis.