Evaluation of the clinical courses of patients who were diagnosed with acute rheumatic fever in children

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Introduction: Rheumatic heart disease (RHD) is an important public health issue, particularly in the developing country, but its true progress is unknown in our region. The purpose of this study is to evaluate the clinical progress of patients who were diagnosed with acute rheumatic fever (ARF) and RHD.

Methods: Medical records of patients who were diagnosed as having ARF in our clinic were evaluated retrospectively and patients who had at least 2-year follow-up after the diagnosis were included into the study. Diagnosis of ARF was done by using revised Jones criteria. Acute and chronic phase valve involvements are compared.

Results: A total of 163 children formed the study group. The follow up period ranged from 2-11 years. During the initial attack 88.3% of patients had carditis: mild in 86.8%, moderate to severe in 13.8%. Among patients with moderate-severe carditis, moderate to severe valve insufficiency was detected in at least one valve. Most common valve involvement was mitral insufficiency (n=135, 93.8%). At last visit rheumatic heart disease (RHD) was present in 135 valves of 102 cases; 92 mitral, 42 aortic. No valvular regurgitation was detected in 55.9% of patients with silent carditis, and in 20.9% with clinical carditis. In patients with mild, moderate and severe valvular regurgitation full recovery rates at last visit were 56.7%, 20.6%, and 5.5%, respectively. Recurrence rate was 2.1% among patients who were well adapted to secondary prophylaxis, whereas the rate was 94.4% who were not well adopted.

Conclusions: In ARF patients, recovery rate of valve insufficiency is high if it is mild. The increased risk of progressing to severe chronic valvar disease was associated with moderate or severe carditis and recurrences of ARF. Regular and appropriate prophylaxis is important to prevent the recurrence of the disease.