

What's the outcome of carditis in Children with Sydenham's Chorea

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Introduction: Acute rheumatic fever (ARF) is a common cause of heart disease in our country. The carditis is most common major findings accompany Sydenham chorea (SC). However there are very limited studies which evaluating outcome of carditis in patients with chorea.

Methods: We screened all patients diagnosed with ARF, between 1999 and 2011 years, retrospectively. We evaluated only children diagnosed with SC at the first attack of ARF. To determine frequency and outcome of carditis in patients with SC, we evaluated their clinical and echocardiographic features at the initial and follow-up examinations.

Results: A total of 551 cases were diagnosed with ARF within the study period and SC was established in 69 cases (12.5 %). SC was remarkably more common in pre-adolescents girls. Half of patients had bilateral chorea at presentation. At the initial examination; 20 patients (28.9 %) had a normal echocardiogram. The diagnosis of silent carditis was established in 20 (28.9 %) of cases and clinical carditis was established in 29 (42%) of patients. Pure mitral regurgitation was detected in 36 (73.4 %) of patients with carditis. Carditis was mild in 41 patients (83 %), only one case had severe carditis with third degree mitral and aortic regurgitation. 63 cases were followed from one to ten years. Improvement rate of valvulitis in cases with silent carditis (29.4 %) was not different than cases with clinical carditis (18.5%) ($p>0.05$). Persistence of valvular pathologies occurred in 72.2 % of cases with carditis in the long-term follow-up (>2 years). Most patients (88.8 %) complied with secondary prophylaxis, so relapse of carditis was exclusively prevented in our patients. Recurrence of chorea was identified in 20.6 % of cases and not associated with clinical or laboratory evidence for streptococcal reinfection.

Conclusion: Patients with chorea usually had mild carditis and it showed resolution during follow-up. Relapse of carditis was exclusively prevented with secondary prophylaxis in our population. Recurrence of chorea was not rare, despite regular treatment with benzathine penicillin.