

Prevalence and follow-up of subclinical rheumatic heart disease amongst asymptomatic school children in a north-western district of India based on the World Heart Federation echocardiographic criteria

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Abstract

Background Past active surveillance have reported prevalence of subclinical RHD amongst school children which are not comparable because of major differences in screening methods. The present study is based on the WHF criteria to assess the prevalence of subclinical carditis due to RHD and elucidate evolution of the disease when these children were placed on appropriate antibiotic prophylaxis and regular follow-up. This is the first large active surveillance study which has been conducted in a single district of India after the publication of WHF criteria and is reporting short-medium term follow-up data. Methods For active surveillance of RHD among urban and rural school children of Bikaner, a random inclusion strategy was adopted. The diagnostic labelling based on the echocardiographic criteria proposed by World Heart Federation was done by a group of experienced cardiologists. The follow up of the patients recruited in to the study was done to ascertain the early evolution of the disease in the presence of appropriate antibiotic prophylaxis. Results A high prevalence of subclinical RHD was noted in the study population. Pathological mitral and/or aortic valves regurgitation was the commonest lesion and significant proportion of cases improved on regular antibiotic prophylaxis. There was no case of fixity of leaflets/ stenosis. Conclusion The prevalence of subclinical RHD and these cases are reversible if appropriate antibiotic prophylaxis is instituted at an early stage.

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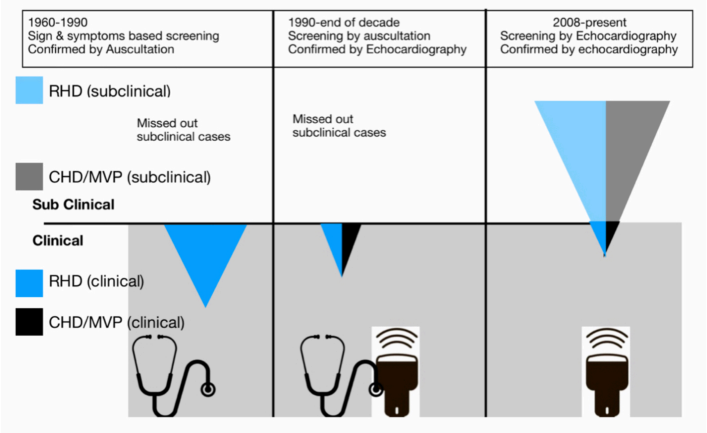


Figure 1 : Changes in the screening methods for RHD in last few decades