

## ABSTRACT

**Background:** Rheumatic heart disease continues to be a major health problem in developing countries like India. In high prevalence area like India, Jones criteria were revised by American Heart Association (AHA) in 2015. This study is to evaluate the effectiveness of revised Jones criteria 2015 in diagnosing rheumatic fever in our population (high risk). **Aim and objectives:** To compare the diagnostic yield of 2015 revised Jones criteria with that of previous Jones criteria in detecting acute rheumatic fever in our population (high risk population). **Materials and methods:** A cross-sectional observational study was conducted at Institute of child health and research centre, Government Rajaji hospital, Madurai in children in the age group of 5-12 years. All suspected cases underwent a detailed history, clinical examination and investigations (including ECHO). **Results:** out of 60 rheumatic fever cases, 50 had first episode and 10 had recurrence of rheumatic fever. In first episode, 50 cases (100%) fulfilled the revised Jones criteria 2015, while only 31 cases (62%) were diagnosed by old Jones criteria. In recurrence group, 10 cases (100%) fulfilled revised Jones criteria 2015, while only 7 cases were diagnosed by old Jones criteria. In both the groups, the diagnostic yield of revised Jones criteria 2015 was statistically significant ( $p$  value - 0.0001). The contribution of subclinical carditis, Polyarthralgia and Monoarthritis as major criteria in diagnosing rheumatic fever cases were 23%, 20% and 13% respectively. **Conclusion:** To conclude, revised Jones criteria 2015 is found to be superior in diagnosing rheumatic fever than previous guidelines in our study group.

**Keywords:** Acute rheumatic fever, revised Jones criteria, AHA 2015, subclinical carditis, ECHO.