A STUDY ON BACTERIOLOGICAL PROFILE OF INFECTIVE ENDOCARDITIS IN PATIENTS ADMITTED IN A TERTIARY CARE HOSPITAL

ABSTRACT

Background: Infective endocarditis (IE) is an important cause of morbidity and mortality till in this modern medical world. The pattern of the disease in terms of the host, agent and the environment appears to be changing globally. Methods: Patients admitted in a tertiary care hospital - Rajiv Gandhi Government General Hospital, Chennai, between April 2017 and March 2018 with symptoms and signs suggestive of IE and Echocardiogram suggest the same were determined as definite IE and possible IE as per the modified Duke’s criteria, included in this prospective analysis. We analyzed the demographic, microbiological pattern and type of valve involved and outcome of the cases and compared our results with similar studies done in India over the last 3 decades to assess the changing pattern of IE.

Results: 60 patients were diagnosed to have IE [definite IE and possible IE] based on modified Duke’s criteria. The mean age of the patients was 37±14.23 years. There was slight male predominance (1.2:1). Culture positive endocarditis was seen in 28.3%. Staphylococcus species was the predominant etiological agent followed by Enterococcus spp. Native valve endocarditis was seen in 77% of patients while prosthetic valve and pacemaker endocarditis was seen in 21.3% and 1.7% respectively. Mitral valve was the most commonly affected valve (56.7%), followed by the aortic valve (26.5%). Echo detecting Vegetations sensitivity was 88.3%. The in-hospital mortality rate was 18%. Refractory congestive cardiac failure and septic shock were the complications associated with a poor outcome in terms of survival.

Conclusion: The disease profile of patients has undergone a change with an increase in mean age and increased percentage of Staphylococcus spp and Enterococcus spp causing endocarditis and increased reports of Health care associated IE. Despite significant advances in modern medicine over the last 3 decades, mortality rate remains the same.

Key words: Infective endocarditis, India, Native valve endocarditis, Culture positive Infective Endocarditis.