A clinical audit on the appropriateness of management for infective endocarditis in a tertiary heart centre in Malaysia

Ho Yik Hon¹, Lim Caryn Tsujean¹, Chua Chelfi Zhi Fei¹, Chow Han Bing², Chua Hock Hin³, Ong Tiong Kiam⁴

¹Department of Cardiology, Sarawak Heart Centre, Kota Samarahan, Sarawak, ²Department of Medicine, Faculty of Medicine and Health Sciences, University of Malaysia Sarawak, Kota Samarahan, Sarawak, ³Infectious Disease Unit, Department of Internal Medicine, Sarawak General Hospital, Kuching, Sarawak

ABSTRACT

Introduction: Infective endocarditis (IE) mostly affects the younger age group population in developing countries. It is a disease associated with a high incidence of mortality and morbidity. Little is known about the true incidence of IE in Malaysia. This clinical audit is aimed to evaluate adherence to IE management by the national guidelines. Methods: Data was collected retrospectively using a standardized audit form. Initial investigations, antibiotic therapy and surgical indications for IE were among the data collected. The adherence to IE management was then assessed by referring to the national guideline ‘2017 Clinical Practice Guideline for the Prevention, Diagnosis & Management of Infective Endocarditis’. Results: Thirty-seven patients were recruited. The majority of the parameters audited did not achieve the expected standard of the national guideline. These include parameters such as blood culture taking, incubation period of the blood cultures taken, appropriateness of empirical and culture-guided antibiotics; as well as follow-up blood culture, echocardiogram and patients’ education. None of the patients audited had undergone surgery despite clinically indicated in some of the cases. The positive points from this audit include echocardiograms being performed within 24 hours of presentation, repeat trans-oesophageal echocardiograms for indicated patients, and patients with complicated IE being referred to a specialised centre for management. Conclusion: The compliance with the national guideline on IE management in our hospital was suboptimal. There is ample room for improvement in the process of blood culture taking, antibiotics and surgical management to provide better care for patients with IE.