Factors associated with in-hospital mortality among infective endocarditis patients

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ABSTRACT
Introduction: Despite recent advancements in the diagnosis and management of infective endocarditis (IE), it is associated with substantial morbidity and mortality. Our study objective is to determine the factors associated with in-hospital mortality in IE patients among the local population. Methods: All IE patients who were diagnosed with definite or possible IE and were treated at Sarawak Heart Centre from 1st January 2020 to 31st December 2020 were recruited. We examined the demographic features of the subjects and the factors that contributed to in-hospital mortality. Multivariate logistic regression was used to analyze the associated factors and in-hospital mortality. Results: Our study population comprised a total of 37 patients with a mean age of 46.4 years and male predominance. The in-hospital mortality rate of IE in this study was 44.4%. Haemodynamic instability and anaemia were found to be strong predictors of IE survival outcome, with sizeable odds ratios of 51.5 and 35.7 respectively. Patients with vascular phenomenon and heart failure were at 10.5 and 6.0 times higher risk of dying, however, these 2 associations were found to be not statistically significant. Conclusion: The in-hospital mortality due to IE in our study was among the highest in developing countries. Factors of hypotension and optimal response to individual hemodynamic parameters may confer lower mortality. While anaemia is demonstrable as a risk factor for inpatient mortality, a target has yet to be reasonably established.