Submission Id: 241

Title: PROFILE OF RHEUMATIC HEART DISEASE AT CARDIAC CENTER IN MEDAN CITY, INDONESIA: MORBIDITY AND MORTALITY

Authors: Tengku Winda Ardini, Aziz Achmad, Fadlan Aufar Malik

Background & Aims: Rheumatic heart disease (RHD) can be easily transmitted from person to person similar to other upper respiratory tract infections. Streptococcus infections are most common in childhood. RHD generally remains latent or silent until cardiac complications arise in late adulthood. The most common complications include infective endocarditis, embolic event, heart failure, pulmonary hypertension, and atrial fibrillation, resulting from untreated severe valvular disease. The objective of our study was to determine the prevalence and observe the characteristics of RHD patients at Haji Adam Malik General Hospital.

Methods: In this retrospective study, data were collected at the Haji Adam Malik Hospital echocardiography laboratory from 2020 to 2022. The data were obtained from medical record and based on trans-thoracic echocardiography (TTE) examinations.

Results: A total 6925 TTE examinations were conducted, and we identified 320 RHD patients in our study (4.6%). The majority of our patients were in the 31-40 years age category. Among them, 156 patients manifested atrial fibrillation, and 25 patients were declared dead during the study period. Case fatality rate for RHD in our study was 7.8%.

Conclusions: RHD remains a substantial public health concern, with a persistently high prevalence in low to middle income countries. Furthermore, there is a notable increase in morbidity, particularly among the young age category, such as atrial fibrillation, along with a considerable mortality rate.