Massive pericardial effusion as the cardiac manifestation of salmonella enteritidis infection in a severely immunocompromised patient

Ho Yik Hon¹, Lim Caryn Tsujean¹, Ling Hwei Sung², Thung Su Fui³, Chua Hock Hin³, Ong Tiong Kiam¹

¹Sarawak Heart Centre, ²University of Malaysia Sarawak, ³Sarawak General Hospital

ABSTRACT

Introduction: Acute purulent pericarditis is not commonly encountered in clinical setting but can be potentially life-threatening if not identified early and adequately treated. In the last decade, salmonella pericarditis is mainly caused by Salmonella enteritidis compared to 19th century when Salmonella typhi predominated. Case Description: A 41 years old gentleman was admitted for reduced effort tolerance preceded by non-specific symptoms of weight loss, profuse sweating and urinary incontinence. Chest X-ray showed cardiomegaly and echocardiography showed large septated pericardial effusion. Emergency pericardiocentesis was performed and culture of pericardial fluid grew Salmonella enteritidis. He was also found to be immunocompromised due to retroviral infection with CD4 count of 10 cells/µL. Antibiotics were administered and he was started on HAART therapy. Pericardial drain was inserted due to rapid re-accumulation of pericardial fluid after initial pericardiocentesis. Repeated echocardiogram after treatment showed early signs of constrictive pericarditis. Intrapericardial fibrinolysis was considered but patient succumbed to opportunistic infection by cytomegalovirus before further treatment can be given. Discussion: The volume of pericardial effusion in Salmonella pericarditis might have prognostic significance as patient with massive pericardial effusion tends to have poorer outcome. Treatment of complicated and rapidly accumulating pericardial effusion include pericardiocentesis, antibiotic treatment and pericardial drain. The role of intrapericardial antibiotic is a field for potential future study. Intrapericardial fibrinolysis and pericardiectomy might have a role in the setting of constrictive pericarditis. Conclusion: The shifting trend of Salmonella pericarditis to S. enteritidis species in recent decades might have public health implication to immunocompromised group of patients.