Melioidosis in Pahang

How SH1, *Wan Nurliyana WR1, Jamaluddin AR2, Bee CL3, Kiren K3, Ros S4, Thian CL5, Siti Sanna WA6, Fong VK7, Mohd Rahim S8

1Department of Internal Medicine, Kulliyyah of Medicine, IIUM Kuantan
2Department of Community Medicine, Kulliyyah of Medicine, IIUM Kuantan
3Clinical Research Centre, Hospital Tengku Ampuan Afzan Kuantan
4Department of Microbiology, Hospital Tengku Ampuan Afzan Kuantan
5Department of Medical, Hospital Tengku Ampuan Afzan Kuantan
6Department of Medical, Hospital Sultan Ahmad Shah Temerloh
7Department of Medical, Hospital Pekan
8Epidemiology Unit, Public Health Division, Pahang State Health Department

Abstract

A state-wide review of melioidosis cases from year 2000 to 2005 in Pahang, Malaysia showed a high annual incidence and mortality rate, likely due to inappropriate antibiotics. A series of medical education programme was implemented throughout Pahang and a registry was setup to monitor the impact. A retrospective review was performed to validate data from registry and culture-confirmed melioidosis cases occurring in between year 2011 and 2015 from all microbiology laboratories across Pahang. Incomplete information from registry was verified from patient’s case note. Characteristics, predisposing factors, clinical presentation, sensitivity and outcome of melioidosis were obtained. During the five-year study period, a total of 294 patients had positive culture for *Burkholderia pseudomallei*. Majority were Malays and male, with median age of 52 years old. Diabetes was the most common predisposing factor, which was present in 72.6% of patients, followed by chronic renal failure. Pneumonia was the most frequent clinical presentation, which was seen in 43.6% of patients. 82% of patients had bacteremia. Among 210 patients with known outcome, 46.2% of patients died. For those patients discharged well, appropriate antibiotics were given to almost all. The relapse rate was only 1.7% as compared to 19% from 2000 to 2003. There was no increased resistance in the commonly used antibiotics for melioidosis. Despite improvement of patient management after an extensive education programme, mortality remained high.

Keywords: Melioidosis, registry, medical education programme

*Authors for Correspondence