RESEARCH ARTICLE

Pediatric melioidosis in Sarawak, Malaysia: Epidemiological, clinical and microbiological characteristics

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Abstract

Background
Melioidosis is a serious, and potentially fatal community-acquired infection endemic to northern Australia and Southeast Asia, including Sarawak, Malaysia. The disease, caused by the usually intrinsically aminoglycoside-resistant Burkholderia pseudomallei, most commonly affects adults with predisposing risk factors. There are limited data on pediatric melioidosis in Sarawak.

Methods
A part prospective, part retrospective study of children aged <15 years with culture-confirmed melioidosis was conducted in the 3 major public hospitals in Central Sarawak between 2009 and 2014. We examined epidemiological, clinical and microbiological characteristics.

Findings
Forty-two patients were recruited during the 6-year study period. The overall annual incidence was estimated to be 4.1 per 100,000 children <15 years, with marked variation between districts. No children had pre-existing medical conditions. Twenty-three (55%) had disseminated disease, 10 (43%) of whom died. The commonest site of infection was the lungs, which occurred in 21 (50%) children. Other important sites of infection included lymph nodes, spleen, joints and lacrimal glands. Seven (17%) children had bacteremia with no