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Clinical

POSTER

The Use of Active Melioidosis Detect TM in Early Diagnosis of Melioidosis in Hospital Tengku Ampuan Afzan and Hospital Sultanah Nur Zahirah

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Introduction: Melioidosis is endemic in Malaysia and an important cause of sepsis. Current gold standard for diagnosis is by culture method, but its long procedure will delay the treatment leading to hospital-related mortality. Thus, a good rapid test is needed to reduce its mortality burden. Recently, Active Melioidosis Detect (AMD) have been shown to be useful. **Objectives:** (1) To measure the sensitivity and specificity of AMD. (2) To study the sensitivity and specificity of early morning urine AMD compared to spot urine AMD. **Materials and method:** A prospective cross-sectional study of clinically suspected melioidosis patients in HTAA and HSNZ from April until December 2018. Blood and urine samples were tested with AMD. Test results were analysed for sensitivity, specificity, positive predictive value and negative predictive value. **Results:** A total of 89 patients were included in this study. The mean age is 52 years old, and 56.3% were male gender. 64% of patients have diabetes mellitus. 11 patients have positive blood culture for *Burkholderia pseudomallei*, 4 of them were tested positive for AMD. 3 of them presented with septic shock (3.4%), however none died. The sensitivity of the AMD was 36.4% ([95% CI 12.4 to 68.4]) and the specificity was 66.7% ([95% CI 46.0 to 82.8]) in all samples, with positive predictive value of 30.7% and negative predictive value of 72%. Blood samples have lower sensitivity of 9.1% ([95% CI 4.8 to 42.9]) with high specificity of 100% ([95% CI 84.5 to 100]). Urine spot samples have higher sensitivity compared to serum and morning urine, with 36.4% ([95% CI 12.4 to 68.4]) and specificity of 88.9% ([95% CI 69.7 to 97.1]). **Conclusion:** From this pilot study, this test requires further evaluation before incorporating as point of care assay.