

## Melioidosis: A Deadly Disease Mimicking Leptospirosis Reported from a Highly Endemic Area of Sri Lanka

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Melioidosis is endemic in Sri Lanka. We present a case of melioidosis which led to diagnostic confusion and an unfavourable outcome. A 53-year-old paddy farmer from Kurunegala was admitted to the University Hospital, KDU with fever, myalgia, arthralgia, headache, and loss of appetite for 1 week. He was a diabetic with poor glycaemic control and had engaged in farming during the preceding month. On examination, he was febrile, dyspnoeic and had multiple abrasions on both feet. His temperature was 101° F, blood pressure 180/110mm Hg, respiratory rate 40/min, heart rate 118/min, SpO<sub>2</sub> 78%, blood lactate 2.4mm/L and creatinine 2.1mg/dL with acute kidney injury on admission. Clinical suspicion of sepsis following leptospirosis was made, ceftriaxone 2g daily was started after taking blood for cultures and leptospira studies and was transferred to the ICU. The patient rapidly desaturated and went into septic shock requiring maximum inotrope and ventilatory support. On the following day blood cultures flagged positive for a Gram-negative bacillus and ceftriaxone was changed to meropenem. Patient deteriorated rapidly with refractory shock and persistent hypoxemia and died within 48 hours. A non-lactose fermenting bacterium, resistant to aminoglycosides and colistin was isolated and a probable diagnosis of melioidosis was made. Isolate was confirmed as *Burkholderia pseudomallei* using a specific latex agglutination test and *lpxO* Real-Time PCR assay. Genotyping revealed isolate belongs to Yersinia-like fimbrial (YLF) group which carry bimABp allele variant. Leptospirosis micro agglutination test was negative. Melioidosis may mimic leptospirosis. However, the antibiotics prescribed for leptospirosis are ineffective in the treatment of melioidosis. Therefore, melioidosis should be a differential diagnosis in patients with acute sepsis from highly endemic areas.

**Keywords:** *melioidosis, leptospirosis, deadly disease*