


CASE REPORT

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# Disseminated melioidosis in early pregnancy - an unproven cause of foetal loss

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## Abstract

**Background:** Melioidosis is a potentially life-threatening infection caused by the Gram-negative bacterium *Burkholderia pseudomallei*. Melioidosis is difficult to diagnose due to its diverse clinical manifestations, which often delays administration of appropriate antibiotic therapy.

**Case presentation:** Melioidosis is uncommon in pregnancy but both spontaneous abortion and neonatal melioidosis have been reported. We report a case of bacteraemic melioidosis in a young woman with a subsequent spontaneous abortion, with *B. pseudomallei* cultured from a high vaginal swab as well as blood.

**Conclusion:** It remains unclear in this and previously reported cases as to whether the maternal melioidosis was sexually transmitted.

**Keywords:** Melioidosis, *Burkholderia pseudomallei*, Pregnancy, Abortion

## Background

Melioidosis is an infection caused by the Gram-negative bacterium, *Burkholderia pseudomallei*. It is an endemic disease in northern Australia and Southeast Asian countries, especially Thailand and Malaysia, and is being increasingly recognised in other regions globally [1].

Melioidosis can virtually affect any organ in the body and can present with diverse clinical manifestations, including pneumonia, genitourinary infection, skin and soft tissue infection, internal organ abscesses, neurological melioidosis, septic arthritis, and fulminant sepsis without evident focus [2]. Despite improvements in antibiotic therapy, melioidosis is still associated with a high mortality attributable to severe sepsis and its complications [3].

Among the well-recognized modes of acquisition are inhalation, ingestion, and inoculation, but the relative contributions of each are yet to be determined [3].

Person-to-person transmission of *B. pseudomallei* is very uncommon. Sexual transmission in particular, has been suggested but has not been definitively established as a mode of infection [3, 4]. There was one reported case of possible sexual transmission from a returned United States serviceman to his partner. He was diagnosed with culture-confirmed *B. pseudomallei* prostatitis. Upon further investigations, both the patient and his wife demonstrated high indirect haemagglutination assay (IHA), which was considered suggestive of recent *B. pseudomallei* infection [5]. Nevertheless the wife was asymptomatic and her vaginal and cervical cultures were negative for *B. pseudomallei*. Therefore, this case report which is often quoted as evidence of sexual transmission of *B. pseudomallei* remains speculative and unconfirmed.

There has been very little clinical evidence on pregnancy outcomes in women with melioidosis, and it is unknown if pregnant women are specifically more susceptible to *B. pseudomallei* or if they experience more severe disease [6]. We present a case of bacteraemic melioidosis with splenic abscesses in a young, healthy

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