

A Case Of Disseminated Melioidosis With Multiple Joint Septic Arthritis

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INTRODUCTION:

Melioidosis is a tropical disease caused by *Burkholderia pseudomallei*. Musculoskeletal involvement in melioidosis are less common presentations. We present a case of septic arthritis caused by melioidosis with multiple joint involvement.

METHODS:

A previously healthy 17-year-old boy presented with a 2-week history of fever and 1-week history of right knee swelling and pain. Examination revealed a swollen, tender right knee with limited range of motion. Aspiration of knee joint revealed hemopurulent fluid. A diagnosis of right knee septic arthritis was made. The patient was started on IV cloxacillin and penicillin. He underwent emergency right knee arthrotomy washout. Post-surgery he still had persistent fever. Specimen from the surgery grew *Burkholderia pseudomallei*, sensitive to meropenam, imipenem, trimethoprim-sulfamethoxazole, and ceftazidime. Antibiotics was changed to IV ceftazidime.

Over the next 3 weeks, patient was not improving clinically. Patient was noted to have progressive involvement of other joints, which are left knee, bilateral ankle, bilateral 1st metatarso-phalangeal joints, and bilateral wrists, all of which was immediately drained. His blood cultures consistently grew *Burkholderia pseudomallei*. His antibiotics was changed to meropenem in view of poor response to ceftazidime.

RESULTS:

The patient showed clinical improvement after 1 month of IV meropenem. Blood cultures were also negative for melioidosis. His antibiotics were change to oral trimethoprim-sulfamethoxazole for 6 months. During subsequent follow-up, he showed improvement in wound healing and limb function.

DISCUSSIONS:

The majority of melioidosis patients with septic arthritis have monoarthritis. In this case our patient presented with monoarthritis and had progressive involvement of other joints during admission. Initially, he was not responding to ceftazidime despite its sensitivity and improved after changing to meropenem.

CONCLUSION:

In patients with septic arthritis from melioidosis, multiple joint involvement should be suspected if patients do not improve despite arthrotomy washout and antibiotics. Multiple joint involvements might not be apparent during initial presentation.

REFERENCES:

1. Morse, Levi P., et al. "Osteomyelitis and septic arthritis from infection with *Burkholderia pseudomallei*: a 20-year prospective melioidosis study from northern Australia." *Journal of orthopaedics* 10.2 (2013): 86-91.