

# A Rare Case Of Isolated *Burkholderia Pseudomallei* Osteomyelitis Of Single Phalanx In Paediatric Without Liver Or Spleen Involvement

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## Introduction

Melioidosis is an endemic tropical or subtropical disease caused by *Burkholderia pseudomallei*<sup>1</sup>. The overall estimated annual incidence in Sarawak is 4.1 per 100,000 children <15 years. Primary osteomyelitis caused by melioidosis is rarely reported<sup>2</sup>.

## Report

A 10 year old girl with no known medical illness presented with fever and right middle finger swelling with a sinus over the middle phalanx region. She had been previously treated with oral antibiotics by the local GP for 1 month with no improvement. She had no history of trauma, but had history of school trip to a river. X-Ray showed features of subacute osteomyelitis. Debridement was done, granuloma was seen subperiosteally. P2 bone was eroded with pus. Swab, tissue and bone culture were found positive with *Burkholderia pseudomallei*. AFB was negative, ESR and CRP weren't raised. Abdominal ultrasound was normal with no liver or splenic abscess. She was given IV Ceftazidime and T. Co-trimoxazole as melioidosis eradication therapy for 3 months. Patient returned during clinic visit with a well healed wound.



Figure 1: Right hand X-Ray



Figure 2: Patient's hand during clinic follow up

## Discussion

Previously it was thought that joint or bone infections in children secondary to melioidosis tend to be a secondary occurrence<sup>2</sup>. However, a rare localized form can occur such as in this case. Melioidosis is common with underlying diseases such as diabetes mellitus, liver or heart conditions<sup>1</sup>; we did not find a specific cause in this patient. Follow up is essential to detect any sign of growth arrest in the future.

## Conclusion

A high index of suspicion is necessary in managing patients from melioidosis endemic area as there might be atypical manifestation as this report has suggested.

## References

1. Raja NS et al., *Burkholderia Pseudomallei* Causing Bone and Joint Infections: A Clinical Update, January 2016
2. Mohan A et al., Pediatric melioidosis in Sarawak, Malaysia: Epidemiological, clinical and microbiological characteristics, June 2017