

A Rare Occurrence Of Melioidosis From An Open Fracture: A Case Report

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INTRODUCTION

Melioidosis is an infection caused by Gram negative organism *Burkholderiapseudomallei*, which commonly found in soil and water. It can affect many systems, causing a significant risk of morbidity and mortality.

A CASE REPORT

An 11 years old boy, presented to us 5 days after a history of fall into a water-filled drain with complaint of pain and swelling of the right forearm. It was also associated with fever one day prior to admission. Parents admitted to went for traditional massage after the fall. On examination, there was a puncture wound at the proximal third of volar aspect of ulnar side of the forearm. With X-ray of the right radius and ulna showing fracture at the proximal third, he was then treated as open fracture of proximal third right radius and ulna. The fracture was treated conservatively with backslab. IV Cefuroxime was given and debridement was done, however he did not show any sign of improvement. The wound still showing seropurulent discharge and another debridement was done. Tissue culture and sensitivity from the first debridement turned out to be *Burkholderia pseudomallei*, sensitive to Ceftazidime. Once we change the antibiotic according to its sensitivity, he started to show clinical signs of improvement.

DISCUSSION

All open fractures should be addressed aggressively, as the normal protective skin barrier has been compromised and leave the fractured bone at a higher risk of contamination. Thou contamination of the open fracture may be contributed by the organism from the environment (puncture wound, gunshot injury, crush injury, burns etc.); it is well known that most infections are of nosocomial origin.

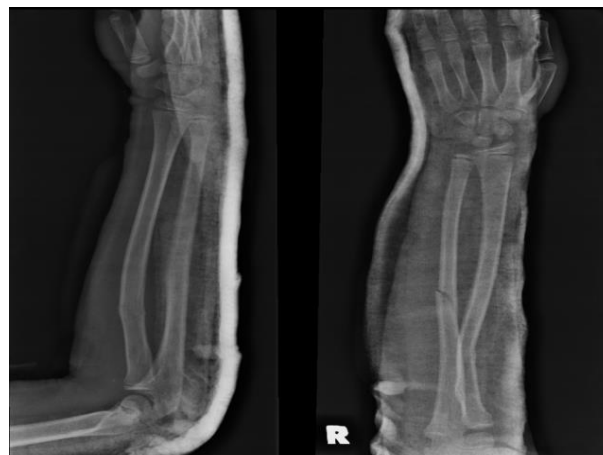


Figure 1

CONCLUSION

Early irrigation and debridement and commencement of antibiotic play a paramount importance in the treatment of open fracture.

REFERENCE

1. Th.Neubauer, G.S. Bayer, M. Wagner, Open Fracture and Infection, Current Concept Review 2006: 73: 301
2. William W Cross, III and Marc F Swiontkowski, Indian Journal of Orthopaedics, Treatment Principles in the Management of Open Fractures 2008: 42 :4 : 377-386