



## Rare Presentation of Burkholderia Infection in A Patient with Diabetic Foot Ulcer.

## KEYWORDS

MELIODOSIS, DIABETIC FOOT, INFECTION, BURKHOLDERIA

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**Introduction**

Melioidosis is a systemic infection caused by non-fermenting gram negative bacilli *Burkholderia pseudomallei*. It is endemic in South East Asia and Australia [1] where it causes infections with protean manifestations. It is now recognized as an emerging infectious disease in India [2]. We present a case report of *B. pseudomallei* infection in a diabetic presenting with diabetic ulcer of right foot.

**Case presentation**

Male aged 50 years presented with right foot ulcer for the duration of 1 month. Patient gives history of small wound following trauma which progressed to right ankle swelling with abscess formation, for which patient went to local hospital and underwent incision and drainage. Following incision and drainage patient presented to our hospital with ulcer over right dorsum of the foot. There was no history of travel to any foreign country. Patient did not give history of fever. He is an agriculturist by profession. The patient was known case of diabetic since 10 years. On examination ulcer present over right dorsum of foot 4 x 8 cm with no restriction in movement of affected joint (Figure 1)



FIGURE 1 – DIABETIC ULCER

Systemic examination – No significant findings. Investigations revealed

Blood culture was negative for any growth.

X ray of ankles was normal with no joint involvement.

USG Abdomen – Normal study. During the course of his stay in the hospital, patient's wound swab was sent for culture and wound debridement done and vacuum dressing was done. Patient's wound swab culture report showed growth of *Burkholderia pseudomallei* species on blood agar media.

The isolate was identified as *B. pseudomallei* by standard biochemical methods [3] and was found to be sensitive to ceftriaxone and cotrimoxazole. The patient was started on Oral Cotrimoxazole BD and Iv Ceftriaxone Iv ceftriaxone, repeat cultures were positive for two weeks but were sterile thereafter; iv antibiotics was continued during hospital stay. Patient's blood sugar was achieved simultaneously. Patient underwent split skin grafting for the ulcer (Figure 2) and was discharged with oral cotrimoxazole for 3 months.



FIGURE 2 – SSG done

**Discussion**

*Burkholderia pseudomallei* is a soil saprophyte, endemic in south east Asian countries – Vietnam, Thailand and also in Australia[1]. Though inoculation is believed to be the major mode of infection, ingestion and person to person transmission have also been suggested in certain cases. *B. pseudomallei* infections are known for their protean manifestations

ranging from systemic manifestations like septicemia, pneumonia & multiple abscesses to asymptomatic infections, local ulcers and abscesses without systemic manifestations. Diabetes has been found to be the single most common predisposing factor in a review [8]. Recently there have been increasing reports of infections with *B. pseudomallei* from India. Cases reported from Indian subcontinent varied from serious manifestations like septicemia [4,5], septic arthritis [6,7], pneumonia [7] to soft tissue infections like scalp abscess, psoas abscess, gluteal abscess [7]

### Conclusion

Melioidosis as a differential diagnosis should be an option in diabetic foot especially in patients with predisposing factors in the Indian subcontinent as there has been an upsurge in case reports of *B. pseudomallei* infections from the region. A very high index of suspicion should be kept both clinically and at laboratory level as cultures of *B. pseudomallei* can very easily be misidentified as those of *Pseudomonas*. Correct identification of *B. pseudomallei* is essential as treatment of these infections require intensive and prolonged treatment

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