



INFECTIOUS DISEASES (BACTERIAL, FUNGAL, VIRAL, PARASITIC, INFESTATIONS)

## MULTIPLE-SITES TUBERCULOSIS OSTEOMYELITIS PRESENTING AS SCROFULODERMA

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**Background:** Tuberculosis osteomyelitis accounts for 1-3% of patients with tuberculosis. Tuberculosis in areas of bone beside hip and spine is less common and detected in advanced stage. Scrofuloderma is a form of cutaneous tuberculosis with a direct extension of an underlying lymphadenitis, synovitis or osteomyelitis. Multiple sites osteomyelitis, especially in extremities, is rarely caused by tuberculosis and remains a diagnostic challenge for clinicians. We present a case of multiple-sites osteomyelitis presenting with cutaneous lesion, which was finally diagnosed as tuberculosis of the bones and scrofuloderma.

**Observation:** A 16-year-old malnourished boy was consulted to our department with severe multiple joint pain (ankle, wrist and elbow) and cutaneous finding of erythematous mass on his posterior ankle. There was previous history of pain and wound in the left ankle 10 years ago, of which he underwent a debridement surgery. His body mass index was 15 with a history of congenital heart defect. On physical examination, a granulomatous mass with a sinus tract discharging serous fluid was found in the right calcaneal region. A whole body CT-scan revealed lytic lesion consistent with osteomyelitis in the right talus, bilateral tibia, bilateral ankle, left radius and left humerus. Bone biopsy, acid fast bacilli (AFB) stain, PCR and culture were performed. Direct AFB stain from tissue's smear gave positive result immediately. The diagnosis was later confirmed by histopathology result of well-formed granulomas surrounded by chronic inflammatory cells, and central necrosis. PCR and culture were also positive for TB. The patient was then treated successfully with anti-tuberculosis drugs.

**Key message:** The presentation of cutaneous lesion directly above the painful bone and immunocompromised state should arise suspicion of scrofuloderma, especially in endemic country. Direct AFB stain of the tissue could help making a prompt and correct diagnosis.

