

Osteomyelitis in Diabetic Foot Ulcer: a common dreaded complication of DM

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Background

Group B β -hemolytic streptococci is a rare offending agent in osteomyelitis with strong affinity for the diabetic foot. A high index of clinical suspicion, alongside radiological studies, should guide prompt diagnosis and treatment to avoid unfavorable complications.

Case Presentation

A 42-year-old obese gentleman with history of hyperlipidemia, hypertension, peripheral artery disease, depression with alcohol abuse, and recently diagnosed type 2 diabetes mellitus and peripheral neuropathy presented to the emergency department with worsening left foot pain for 2 weeks with a nonhealing necrotic ulcer. Upon presentation, he was in no acute distress with insignificant initial labs except for blood glucose of 269 and HBA1c of 10.6. X-ray showed no obvious bone abnormalities with potential subcutaneous emphysema. Empiric treatment with IV Zosyn was initiated. MRI showed cortical changes of 5th metatarsal head compatible with early signs of osteomyelitis. Wound cultures of the necrotic ulcer consecutively grew predominantly group B streptococcus agalactiae. Podiatry was consulted and subsequently performed debridement with partial amputation of the left 5th foot digit.

Discussion

Prompt diagnosis and empiric antibiotic treatment are imperative in the effective management of osteomyelitis, especially in patients with significant comorbidities. Osteomyelitis caused by group B β -hemolytic streptococci should be considered in any diabetic patient with foot lesions, even in the absence of systemic signs and symptoms, such as fever and bacteremia. Additionally, all patients diagnosed with type 2 Diabetes should be counseled in the prevention and care of foot lesions.

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