

Orthopaedic Management In Impalement Injury In Lower Extremity: A Case Report

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INTRODUCTION:

Impalement injuries are rare but may present with significant damage and potential life threatening. It limited to only few reports in the literature and among the cases, not much discussed regarding musculoskeletal impalement injury.

REPORT:

This is a case of a 22 years old gentleman who was alleged step on a wood while working in an orchard on January 2024 sustained bleeding right foot. Local examination revealed puncture wound over plantar midfoot. Noted skin tenting dorsal midfoot with palpable foreign body.

Plain radiograph revealed gas shadow between right first and second ray correspond with clinical skin tenting and palpable foreign body (**Figure 1**).

Initial treatment was done with wound irrigation and tetanus toxoid. A proper surgical debridement and removal of foreign body was done one day post trauma. Intraoperatively, wound was explored through entry wound over plantar foot, one new incision done over skin tenting dorsal foot creating exit wound. Noted 3 pieces of wooden sticks with length 2 inches piercing from plantar to dorsal compartment with the tip lies beneath skin layer (**Figure 2**). Noted 3cc seropurulent collection surrounding foreign body. No vital structure injury. Wound was left open and daily hydrosyn packing was done.

Second look wound debridement was done a week after first surgery. Patient was discharged after completion of Intravenous Cefuroxime and Metronidazole for a week. On follow-up one month post trauma, wound was healing well.

CONCLUSION:

Impalement is uncommon injury that sometimes poses challenges in treating the injury. Initial management include exclusion of neurovascular

injury. Proper debridement and foreign body removal with antibiotic administration are principle of management.

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Figure 1



Figure 2