

TWO STAGE RECONSTRUCTIVE SURGERY IN CHRONIC OSTEOMYELITIS OF ISOLATED ULNA

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Introduction: Chronic osteomyelitis is always a challenge to orthopaedic surgeons. The prolonged treatment of chronic osteomyelitis involves high expenses and results in loss of productivity.

Discussion: 55-year-old Malay male, had a fall and sustained open fracture left midshaft ulna and left radial head. He was treated in another hospital with initial wound debridement (WD), k-wiring radial head and plating ulna. The left forearm wound become infected and underwent multiple WD. He presented to us posttrauma 8 months for infected non-union left ulna with osteomyelitis. There is an infected wound on the left forearm with pus discharge from the sinus. Left supination and pronation movement is limited. CRP is 17 mg/L and ESR is 44 mm/h. X-ray left radius ulnar showed non-union fractured left ulna with osteolytic changes. He underwent first stage surgery WD, left ulnar bone resection 10cm and antibiotic cement spacer with K wire insertion. Tissue and bone C&S were *Pseudomonas Aeruginosa* and sensitive to Tazocin. After completing 6 weeks of IV Tazocin, CRP becomes negative and ESR reduce become 35 mm/h. He underwent second-stage surgery removal antibiotic bone cement, vascularized fibular graft (VFG) with plating. After the operation, he was able to supinate 0-90° and pronate 0-45°. The wound is clean and no signs of infection. Osteomyelitis management involves radical WD, dead space management, soft tissue reconstruction and bone stability¹. Antibiotic bone cement is useful in filling the dead space and release antibiotic locally in high concentration without systemic side effect¹. VFG is used after removal of bone cement as it is biomechanically superior to conventional bone graft, able to hypertrophic and early union².

Conclusion: In conclusion, two-stage reconstructive surgery with IV antibiotic in our case yields a good outcome in chronic osteomyelitis management.