

# Finger Salvation in Metacarpophalangeal Joint (MCPJ) Arthritis with Osteomyelitis: A Case Report

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## INTRODUCTION:

Osteomyelitis often requires multiple surgical debridement and prolonged antibiotic administration and, in some cases, amputation. Joint arthrodesis is rarely used in treatment of MCPJ arthritis of 3<sup>rd</sup> finger. We present our experience with joint arthrodesis for treatment of MCPJ arthritis with osteomyelitis.

## REPORT:

Mr R is a 39-year-old Malay man presented with infected wound over right dorsum of hand over 3<sup>rd</sup> MCPJ, after his hand hit the back of lorry. Multiple surgical debridement with vacuum dressing was done. It was then complicated with osteomyelitis of head of 3<sup>rd</sup> Metacarpal bone (MCB) and base of proximal phalanx. We resected 3<sup>rd</sup> MCB head and base of PP (total measuring 2cm defect) with antibiotic cement spacer insertion and poor man's external fixation. We then performed bone cement spacer exchange 4 weeks later. On subsequent follow up, wound healed well with no evidence of infection. Thus, removal of cement spacer and joint arthrodesis with iliac bone graft was done. Intraoperatively, arthrodesis of MCPJ was done by removing the cement spacer and filling the void with tricortical iliac bone and fixing a miniplate across the joint. Miniplate was pre-bend at 30°. After 2 months of wound dressing and physiotherapy, despite being able to minimally flex PIPJ and DIPJ of right middle finger, patient able to resume working. Subsequent x-ray shows no evidence of osteomyelitis or implant failure.

Figure 1:

Picture A shows the placement of tricortical iliac bone to fill the void

Picture B shows the fixing of miniplate across the 3<sup>rd</sup> MCPJ

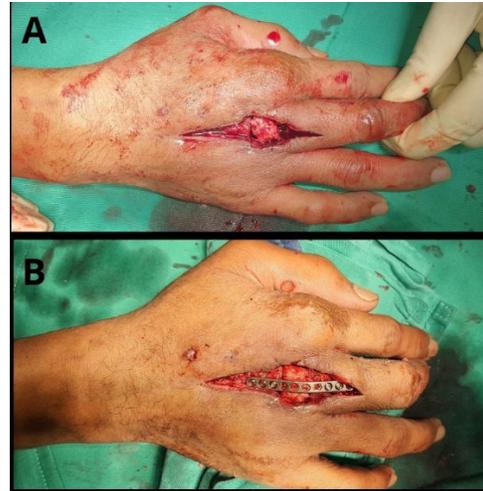


Figure 2:  
X-ray C: 2 months post-op right 3<sup>rd</sup> MCPJ fusion with tricortical iliac bone graft



## CONCLUSION:

Joint arthrodesis of MCPJ with autologous bone graft is a reasonable option in salvaging finger due to arthritis and osteomyelitis.

## REFERENCES:

1. Steven, B.; Daniel, B, Arthrodesis of metacarpophalangeal and interphalangeal joints of the hand: Current concepts. Journal of the AAOS