

STAGED TREATMENT FOR CHRONIC CARPAL AND WRIST OSTEOMYELITIS

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Osteomyelitis (OM) is a pyogenic infection affecting bone tissue and is rare in the hand, being predominantly present in the phalanges and metacarpals and less often in the carpal bones. OM can develop from direct inoculation, contiguous infection dissemination, or via the hematogenous route.

73-year-old male

Comorbidities: **mellitus Diabetes** and Chronic Hepatic Disease

- ☐ Pain and swelling of the right hand with 5 months
- ☐ Wrist pain, stiffness and diminished hand and wrist strength



X-ray : areas of cortical disruption and irregular osteolysis, with associated loss of normal trabecular architecture of the wrist and carpal bones.

Operating room:

1st stage

- Extensive surgical debridement and bone cement insertion were performed



Microbiological culture:
Methicillin-Sensitive
Staphylococcus aureus
(MSSA)

2nd stage (3 months later)

- Surgical debridement and arthrodesis of the wrist with a plate and autogenous radius bone grafting



Staged treatment resulted in resolution of infection and progressive clinical improvement. After wrist arthrodesis with autogenous bone grafting, the patient achieved a stable, pain-free wrist.

Chronic hand osteomyelitis requires a multidisciplinary approach. Staged treatment with antibiotic-loaded cement and autogenous bone grafting is an effective salvage option in destructive cases.