

Crush Injury Of Thumb

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INTRODUCTION:

Metacarpal fractures are the most commonly sustained hand injury. The incidence accounts for 40% of all hand injuries. In severe cases for example crush injury of the hand with bone loss, it often carries an unavoidable poor prognosis resulting non-functional hand.

REPORT:

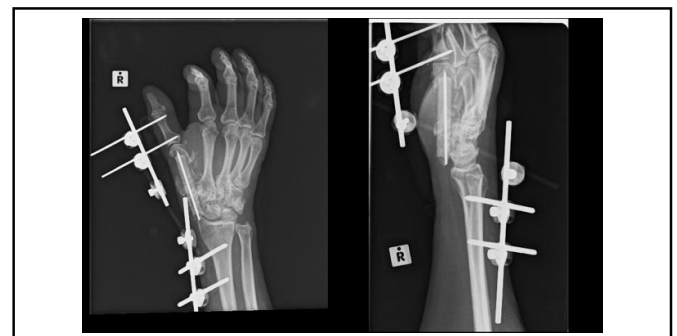
We report a 59 years-old-male right-hand dominant. He sustained grinder related accident with an open comminuted fracture of the first metacarpal bone with bone loss. Examination revealed a degloving injury of the right dorsolateral aspect of the right hand. X-ray showed a comminuted fracture of the right first metacarpal bone. In view of severe comminution with bone loss, we proceed with wound debridement, cross-wrist external fixation to maintain the length and rotation, and antibiotic cement spacer to span the fracture site. A staged surgical procedure is planned for this patient whereby the second surgery's aim is to reconstruct the 1st metacarpal bone to enhance the function.

Reconstruction of bone loss of the first metacarpal will be managed by a fibula strut graft. After a month, the wound had healed well and the length, as well as rotation, is preserved for future pincer grip.

and achieve skeletal stability. Secondary surgery is performed to restore the functionality of the



hand



REFERENCES:

1. Midgley R.D., Entin M.A. Management of mutilating injuries of the hand
2. De Boer HH, Wood MB. Bone changes in the vascularized fibular graft

Figure 1: Pre-operative X ray

Figure 2: Post-operative X ray

CONCLUSION:

The management of crush injuries of hand requires early accurate assessment of the injuries and planned systematic approach. Broadly, the primary emergency surgery should be aimed to remove all non-salvageable tissue