A Unique Operation: Hemi-Hamate Arthroplasty For Chronic Fracture Dislocation With Palmar Lip Fracture Of The Middle Phalanx Of Left Middle Finger

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Introduction

Proximal interphalangeal joint fracture dislocation of the hand is a common injury which can be treated with conservative or management (1). This dislocation injury is usually dorsal and involve the fracture of the palmar lip of the middle phalanx of the involved joint (2). We present a case report of a neglected chronic fracture dislocation of the PIPJ with volar lip fracture of the middle phalanx in a 23 year old male patient, which was treated with hemi-hamate arthroplasty.

Case report

A 23 years old boy presented to the orthopaedic department after his left hand was hit by a football. The middle finger was swollen, deformed, and tender. X ray of the left hand showed there was fracture of the base of the middle phalanx of the middle finger with dislocation of the proximal interphalangeal joint. Closed manipulation and reduction was done and the finger was immobilized with dorsal slab. The X ray during the follow up showed volar displacement of the base of the middle phalanx and re dislocation of the proximal interphalangeal joint of the middle Patient was given option finger. hemihamate arthroplasty of the base of the middle phalanx and patient agreed for the operation. Two weeks post operation, patient had 70 degrees flexion of the finger and full flexion and extension during 6 weeks follow up.



Discussion

Fracture dislocation of the proximal interphalangeal joint is a relatively uncommon injury, but it is a potentially disabling injury leading to stiffness and loss of function(3)

The main indication for hemihamate arthroplasty is involvement of more than 50% of the volar lip of the middle phalanx(4). The operation has given good results in acute and chronic cases.(5). This patient had a sports injury 3 weeks prior and the operation was done in order to reconstruct the volar lip of the middle phalanx of the affected finger and create a near congruent joint surface. Frueh et al recommends the repair of the volar plate(6). The volar plate was repaired in this operation.

Conclusion

This unique and relatively uncommon operation is useful in the management of acute and chronic dislocation of proximal interphalangeal joint of the finger. This operation also gives good results if done with appropriate technique and return the near normal function of the hand of the patient.

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