

Simultaneous Ipsilateral Distal Interphalangeal and Metacarpophalangeal Dislocation of the Fifth Finger: A Rare Case Report

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Abstract

There has been no case of simultaneous ipsilateral distal interphalangeal and metacarpophalangeal dislocation of little finger in the literature. We report a case of A 61 years old male patient with traumatic ipsilateral dislocation of the Dorsal Interphalangeal (DIP) joint with dislocation of the metacarpophalangeal (MP) joint of the little finger. Both the dislocations were reduced by traction and closed reduction.

Keywords: Metacarpophalangeal Dislocation, Dorsal Interphalangeal Dislocation, Rare Simultaneous dislocation.

Introduction

This report was aimed to discuss a rare injury that is simultaneous ipsilateral dislocation of metacarpophalangeal joint (MP) and Distal Interphalangeal joint (DIP) of little finger. Although simultaneous dislocation of MP joint and Carpo-Metacarpal joint of same digit and MP joint and Proximal Interphalangeal joint dislocation of same digit has been reported in previous studies [1,2]. But, simultaneous dislocation of MP and DIP joint in the same finger was not found in the Medical Literature.

Case Details: A 25 years old, female patient reported to OPD with history of fall on hand while walking on the road. Patient reported with complains of pain and swelling over the little finger of left hand and was unable to flex the finger and make a fist with left hand. On local examination, the swelling and tenderness was at MP joint and DIP joint of the 5th Finger. Deformity was present in little finger. Sensory and Neurovascular status of little finger was intact.



Figure 1



Figure 2

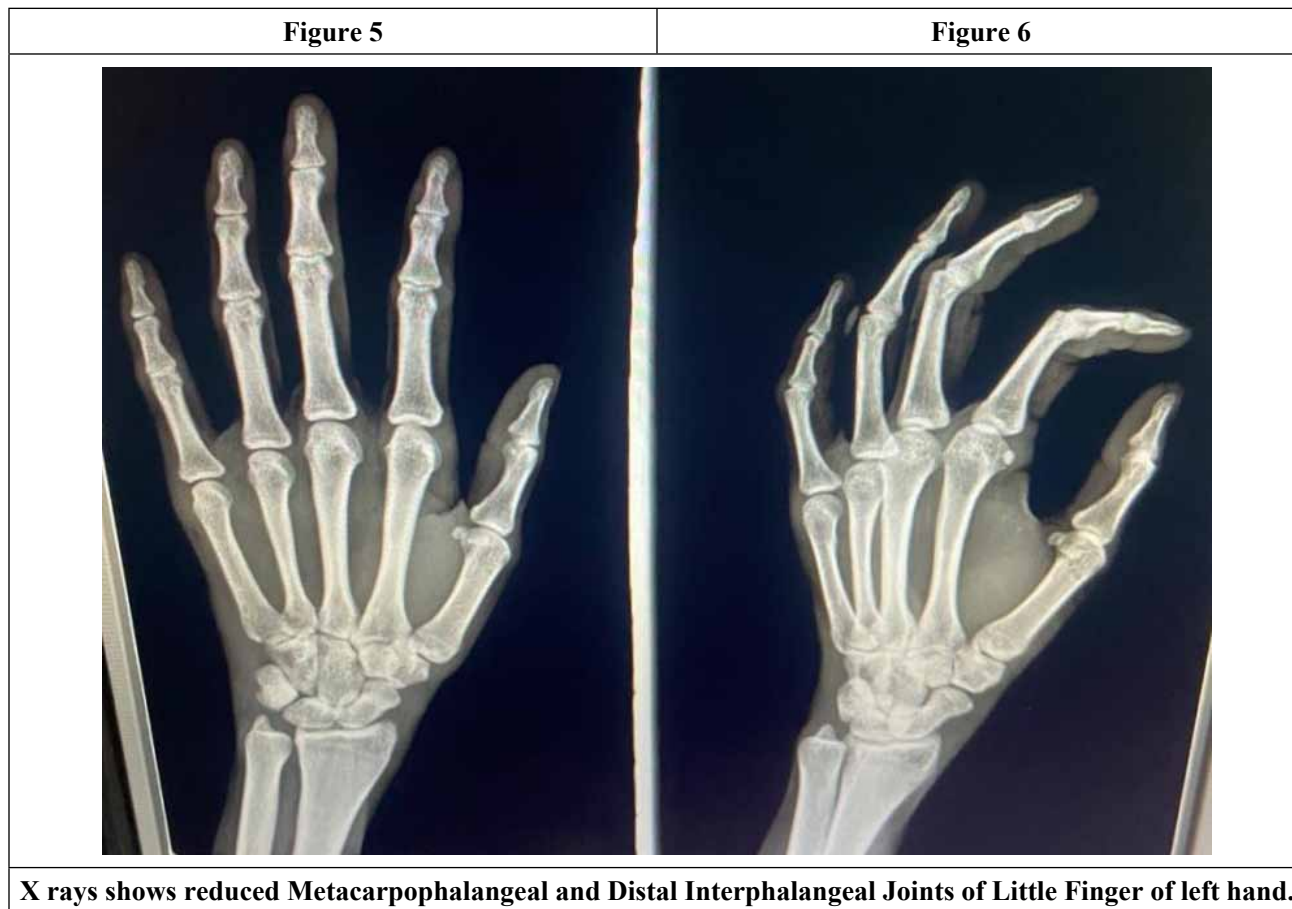
Figure 1 and 2 showing swelling and deformity of the little finger. Figure 2 showing the patient is unable to flex little finger.

Patient was advised Anteroposterior and Oblique Radiographs of hand (Figure 3 and 4) which depicted Dislocation of Metacarpophalangeal joint and Dorsal interphalangeal joint of little finger of left hand with no evidence of fracture.

Figure 3 showing AP view of Hand	Figure 4 showing Lateral view of Hand
The image contains two side-by-side radiographs of the hand. The left radiograph (Figure 3) is an Anteroposterior (AP) view, showing the metacarpals and phalanges of the hand. The right radiograph (Figure 4) is a lateral view, showing the profile of the hand bones. Both views clearly show a dislocation at the base of the little finger (5th digit), specifically at the metacarpophalangeal and dorsal interphalangeal joints. No fractures are visible in either view.	
AP and Oblique Radiographs of hand shows Dislocation of Metacarpophalangeal joint and Dorsal interphalangeal joint of little finger of left hand with no evidence of fracture	

Closed reduction of MP joint was achieved first by giving gentle traction to proximal phalanx under ring block anaesthesia with 2% xylocaine. Thereafter, closed reduction of DIP joint was achieved by gentle traction. The clinical confirmation of reduction was suggested by

correction of deformity of the little finger and patient was able to flex both MP and DIP joints. To verify the reduction radiologically, AP and Oblique radiographs of hand were done which showed reduced MP and DIP joint of little finger of left hand. (Figure 5,6).



Discussion

No case of simultaneous dislocation of an ipsilateral distal interphalangeal and metacarpophalangeal joint of the fifth finger was found in literature. However, a case of simultaneous dislocation of Proximal interphalangeal joint (PIP) and Metacarpophalangeal Joint (MP) of little finger was reported in which PIP joint was reduced by closed reduction and open reduction was needed to reduce MP joint. Another case of ipsilateral dislocation MP joint and Carpometacarpal joint was also reported in literature^{1,2} in which carpo-metacarpal joint required closed reduction and fixation with K wire and MP joint required surgery using Volar approach. Metacarpophalangeal dislocations which are irreducible by closed reduction are rare injuries due to buttonholing

of the metacarpal^{2,3,4}. It is the volar plate which causes hinderance in reduction. However, in our case, the fracture was easily reduced by traction and reduction only and no such difficulties were encountered. The patient regained all the movements of the finger by 6 weeks.

Conclusion

We believe that result and functional outcome of this case was satisfactory. Although, it was a surprise that no such case has been reported in orthopaedic literature till date.

Ethical Clearance: Taken from institutional ethics committee.

Source of Funding: Self.

Conflict of Interest: Nil.

References

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