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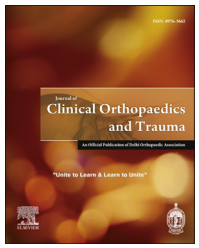

Case Report

A rare case of closed isolated dislocation of the third metacarpophalangeal joint of the hand

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ABSTRACT

Metacarpophalangeal joint [MCP] dislocations of the index, little and thumb are common; that of the middle finger is very rare. In all the literature consulted only five cases of isolated closed dorsal dislocation of the MCP joint of the middle finger have been reported. Hyperextension of MCP joint is the mechanism of injury. We are herewith reporting a case of isolated MCP dislocation of the middle finger.

One of our medical students while driving a motorcycle fell down on the road and sustained lacerated wound over the hypothenar area of the left hand. There was prominence of the head of the third metacarpal on the volar aspect and the base of the proximal phalanx was prominent dorsally. MCP dislocation of the middle finger was our clinical diagnosis which was confirmed by the radiograph. The patient had reported within 60 min of the accident.

There was no tendon injury. Wound debridement was done, wound was extended to the back of the middle finger. The volar plate which was interposed between the head of the metacarpal and the base of the proximal phalanx was repositioned and the dislocation was reduced. Reduction was stable and the patient was reviewed after 14 months. The function of the hand is satisfactory.

The case is presented for its unique presentation. This is the sixth case of isolated dislocation of the MCP joint of the middle finger.

1. Introduction

Isolated Metacarpophalangeal (MCP) joint dislocation of the middle finger is very rare. Some of these MCP dislocations are complex and require open reduction.[1] Rockwood & Green[2] state that "there are no case reports in the literature of isolated dislocations in the ring or long fingers…"These injuries are most common at the index & little fingers where pathology

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Table 1 – Case reports of MCP dislocation of the long finger.

	Author/year	Case details	Management	Outcome	Conclusion
1	Richard Nussbaum (1986)	10/male, injured right middle finger while playing basket ball. No associated injuries. Had treatment immediately	Open reduction immediately by cutting the ligaments & four weeks immobilisation	9 months follow up with full ROM	Open reduction is necessary in complex dislocations
2	Sedel (1986)	25/female injured left middle finger in accident. No associated injuries. Had treatment within 48 h	After failed closed reduction under GA open reduction was done with POP immobilisation	6 months follow up with full ROM	
3	Sedel (1986)	19/male injured left middle finger while playing. No associated injuries. Had immediate treatment	After failed closed reduction under GA open reduction was done with POP immobilisation	4 months follow up with full ROM	
4	Mostapha Boussouga (2004)	24/male hyperextension injury to right middle finger while playing volley ball; reported seven months after attempted closed reduction in a local hospital	Open reduction by dorsal approach	30 months follow up with ROM of 75* of MCP joint	Open reduction is necessary in complex dislocations
5	Mostapha Boussouga (2004)	42/male with injured left middle finger with fall on outstretched hand; reported 18 months after attempted closed reduction in a local hospital.	Open reduction by dorsal approach.	Elective arthrodesis was done as articular surfaces were abraded	Dorsal approach is simple & effective & avoids damage to the digital nerves

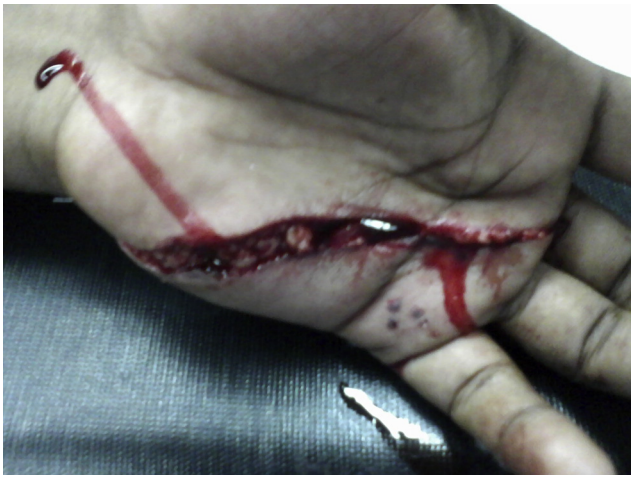

Fig. 1 – Clinical picture of the hand.

Fig. 2 – Showing abnormal anterior prominence of the 3rd metacarpal head.

and operative management are well documented.[1,3,4] There are only five cases of isolated dorsal MCP dislocation of the middle finger in the literature[5] (Table 1). We are herewith presenting a case of isolated MCP dislocation of the middle finger (Figs. 1–9).

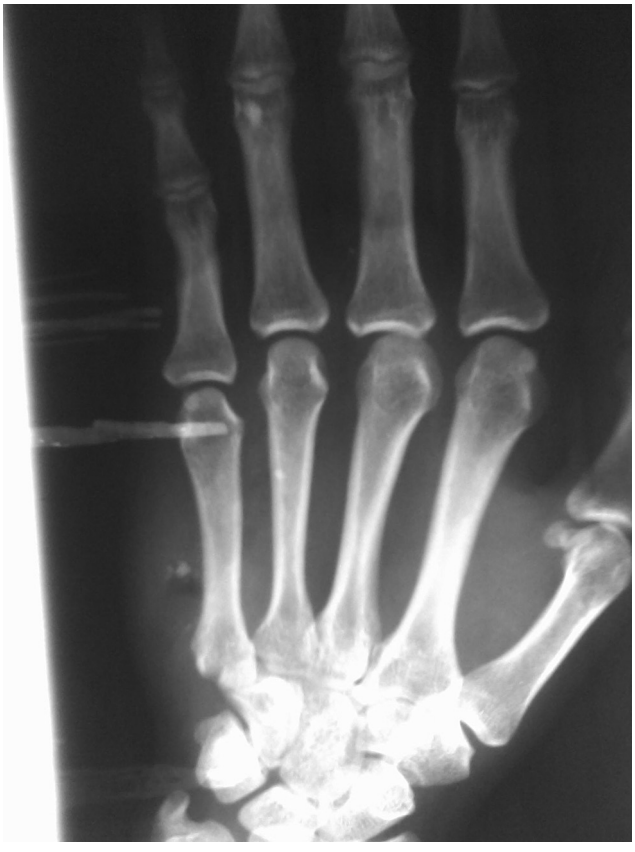

Fig. 3 – Anteroposterior radiographs of the hand confirming the dislocation.