

Rare Second To Fifth Carpometacarpal Joints Fracture-Dislocation With Scaphoid Fracture And Median Nerve Neurapraxia: A Case Report

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INTRODUCTION:

Volar fracture-dislocation of multiple carpometacarpal (CMC) joints of the fingers is very rare. It is usually a result of high-energy trauma and commonly associated with other injuries in the same hand.¹

CASE REPORT:

A 23-year-old man was admitted with left hand pain, swelling and deformity after involved in a motor-vehicle accident. Clinical assessment showed slight reduced sensation over the left thumb, index and middle fingers with increased 2-points discrimination (PD) (6mm) with no evidence of compartment syndrome. He sustained volar fracture-dislocations of left second to fifth CMC joints associated with left scaphoid waist fracture and median nerve neurapraxia. He underwent open reduction, k-wires fixation for the left second to fifth CMC joints, screw fixation of left scaphoid, and left carpal tunnel release. Numbness of the fingers improved immediately post surgery and he regained normal 2-PD (4mm) of left thumb, index and middle fingers at 6 weeks post surgery. He was back to normal activities after 12 weeks.

DISCUSSION:

Volar CMC joints fracture-dislocations are rarer than dorsal fracture-dislocations.² With the joint dislocated volarly, it has the possibility of endanger important volar structures such as median nerve in this case. It is easily overlooked due to subtle abnormalities and lack of understanding in interpretation of plain radiographs. Plain x-rays are the gold standard for diagnosis of CMC joint fracture-dislocation, however computed tomography (CT) can be an excellent adjunct in diagnosis and pre-operative planning. There are interesting debates with regards to the treatment modalities for this type of injury.

Figure 1: Fracture-Dislocation of second to fifth CMC joints and scaphoid fracture.



Figure 2: Post-op radiographs



CONCLUSION:

Posttraumatic CMC joints fracture-dislocation is a heterogeneous group of injuries with wide-range of presentations. High index of suspicion is a must in making the correct diagnosis and not to miss other vital associated injuries. Neglected cases can lead to chronic pain and stiffness secondary to post-traumatic osteoarthritis.³

REFERENCES:

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