

Second and Third Dorsal Dislocation with Fourth and Fifth Fracture-Dislocation of Carpometacarpal Joints

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INTRODUCTION:

Carpometacarpal Joint (CMCJ) dislocation is an uncommon injury, mostly in the dorsal direction.^{1,2} They are easily missed at initial presentation and often require critical scrutiny to diagnose.^{1,3,4} Most reported literatures consist of case reports and series.

REPORT:

A young and fit gentleman had an alleged motor vehicle accident involving a motorcycle and a car. His left hand was swollen but neurovascular was intact. Plain radiographs showed left second to fifth CMCJ dislocation, base of 4th Metacarpal Bone (MCB), and base and neck of 5th MCB fracture dislocation. Left ring finger distal and middle phalanx were fractured as well. A true lateral view showed overlapping of the CMCJ with bone shortening and dorsal angulation. We proceeded with closed manipulative reduction, percutaneous K-wire and plaster splint. He was discharged well post operatively.

Second to fifth CMCJ dislocations are rare injury of the wrist and hand involving only 1 percent.¹ Missed diagnosis and mismanagement often lead to poor outcome such as chronic pain, reduced hand function, swelling, and traumatic arthritis.³ A swollen hand during the trauma often masked the deformity. Standard posterior-anterior and oblique x-rays of the hand may not be obvious in such deformity.^{1,2} A true lateral view of the hand should be requested to look for parallel of the CMCJ and any displacement. Option of treatments include closed or open reduction with percutaneous k-wire. Prokuski et al reported all patients returned to work and had considerably good hand grip function.²



Figure 1: Left Hand Xrays (Oblique, PA, Lateral)



Figure 2: Post Operative Radiograph

CONCLUSION:

CMCJ dislocation of the index to little finger is an uncommon injury. A lateral radiograph and careful observation are crucial to obtain accurate diagnosis.

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