Multiple Carpometacarpal (CMC) Joint Dislocations with Distal Radioulnar Joint (DRUJ) Disruption – A Rare District Encounter

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INTRODUCTION:

Multiple carpometacarpal (CMC) joint dislocations are uncommon injuries with estimated incidence of 1% to 1.5% in global hand trauma¹. These injuries tend to be missed due to edema obscuring the deformity. Also, an untrained eye may face difficulty interpreting hand radiographs due to the many overlapping structures

REPORT:

A 44-year-old gentleman presented to us with pain and deformity over right hand and wrist following a motor vehicle accident, with direct axial force on his right fist. Examination revealed a generally edematous right hand which was dorsally tender on palpation, with limited range of motion of his fingers and wrist. Radiographs showed dorsal dislocations of 2nd - 5th CMC joints with DRUJ disruption. He underwent open reduction, percutaneous pinning and DRUJ wiring. The right upper limb was protected with a dorsal backslab for six weeks before removal and commencement of physiotherapy. He regained full range of motion with adequate grip strength.

CONCLUSION:

Simultaneous dislocations of the 2nd to 5th rays are rare, mainly occurring due to road traffic accidents and violent trauma. Diagnosing these dislocations require a high index of suspicion, meticulous examination, good quality anteroposterior, oblique and lateral radiographs and detailed review and application of radiographic lines such as Gilula and parallel M lines^{1,2}. Due to their instability, these injuries should be fixed with pins after closed or open reduction. Early mobilization should commence after allowing adequate time of healing for the ligaments, usually four to six weeks.³

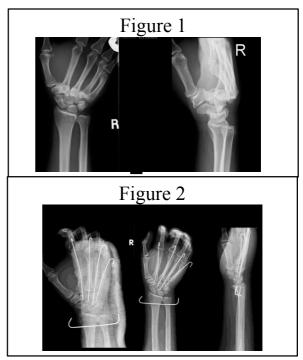


Figure 1: Right hand radiographs showing dorsal 2nd-5th CMC joint dislocations Figure 2: Postoperative radiographs after open reduction, pinning of right 2nd-5th CMC joints and DRUJ wiring

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