

## RARE AND EASILY MISSED, CARPOMETACARPAL DISLOCATION: A CASE REPORT

Ooi Gaik Khim<sup>\*1</sup>; Mohd Firdaus Bin Abdullah<sup>1</sup>; Basir Bin Towil<sup>1</sup>

<sup>1</sup> Department of Orthopedics and Traumatology / Hospital Sungai Buloh

### INTRODUCTION:

Carpometacarpal joint (CMCJ) dislocation is an uncommon injury. CMCJ dislocation commonly results from high-energy wrist trauma. If left untreated, these injuries can lead to chronic pain, stiffness, and post-traumatic arthritis. Conventional radiology remains the first-time imaging modality in the emergency setting. Whenever discordance exists between clinical and radiological observations, CT should be used as a problem solver.

### REPORT:

A 42-year-old male, a lawyer by occupation was brought to emergency department after a road traffic accident. He is left hand dominant. On examination of his left hand, there was a laceration wound ~5cm over the hypothenar region, generalized swelling of the left hand, with tenderness over the carpometacarpal region. Compartments of the hand were soft, with good distal pulses and he was not able to move his fingers due to pain. Plain x-rays revealed a base of 2<sup>nd</sup> metacarpal bone (MCB) fracture (Figure 1). Patient underwent wound debridement and K-wiring of 2<sup>nd</sup> MCB under local anaesthesia. However, intraoperatively, due to the soft tissue swelling, reduction was difficult, and fixation was unsatisfactory. Post operatively, the patient was then counselled for reduction of fracture with plate fixation, without realizing we have missed a carpometacarpal dislocation of the long fingers. Postoperatively, CT scan was performed which revealed a comminuted fracture base of 2<sup>nd</sup> MCB and trapezoid with intra-articular bony fragments. There are multiple intra-articular bony fragments in between the carpal bones. Suspicious dislocation of the scaphotrapezium joint (Figure 2).



Figure 1: Plain radiograph of left hand

Figure 2: CT of left hand

### CONCLUSION:

CMCJ dislocations are uncommon injuries, which are easily missed. Disruption between the second and third rays is a high-energy injury analogous with the divergent Lisfranc's fracture-dislocations of the foot.

### REFERENCES:

1. Wright AC, Muir L. A Review of Published Radiographic Indicators of Carpometacarpal Dislocation Including Their Application to Volar Dislocations Through a Case Study. *Journal of Emergency Medicine*. 2015 Sep 1;49(3):e69–71.