

Trapezoid fracture dislocation: A case report

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INTRODUCTION:

Trapezoid fracture is the least commonly fractured carpal bone with fracture dislocation to be rarer. This is a case report of trapezoid fracture dislocation.

REPORT:

This is a 26 years old male presented with left wrist pain after road traffic accident. Patient was riding motorcycle, skidded and fall over his left side with hand in outstretched position. On examination there was swelling over dorsum of hand with bony prominence felt over 2nd carpometacarpal joint with no wound. Radiography does not show any clear dislocation or fracture. CT Scan showed fracture dislocation over left trapezoid bone [Figure 1]. We proceeded with open reduction and kwiring over left trapezoid bone using dorsal approach [Figure 2].

DISCUSSION:

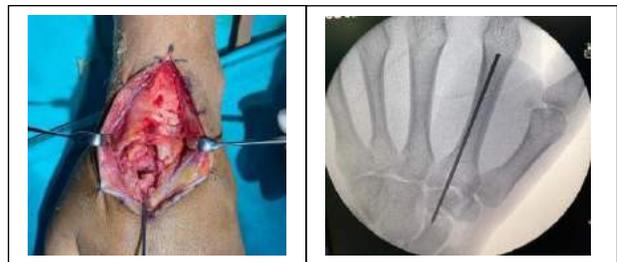
The mechanism of fracture dislocation of trapezoid is from high energy trauma with axial loading¹. Fracture dislocation of trapezoid can be missed on standard x-ray views of the wrist. When there is clinical evidence and high suspicion of the condition, a CT scan is invaluable for diagnostic purposes². From a literature review, only 20 complete dislocations of the trapezoid have been reported. Only 13 of these conditions were isolated extrusions of the bone without other associated fractures or dislocations of adjacent bones³.

CONCLUSION:

Given the rare incidence of the condition, this case report intends to raise awareness of this injury and enlighten clinicians to recognize it. Therefore a lower threshold for appropriate advanced imaging in patients with high-energy trauma to the hand is warranted to avoid missed diagnosis and further morbidity to patients.



[Figure 1] CT scan image



[Figure 2] Intraoperative open reduction and kwiring

REFERENCES:

1. Dorsal dislocation of the trapezoid. *Ostrowski DM, Miller ME, Gould JS J Hand Surg Am. 1990 Nov; 15(6):874-8.*
2. Scaphotrapezio-trapezoidal dislocation. A case report. *Maxwell HA, Acta Orthop Scand. 1993 Jun; 64(3):385-6*
3. Inoue G, Inagaki Y: Isolated palmar dislocation of the trapezoid associated with attritional rupture of the flexor tendon, *J Bone Joint Surg Am 72:446-448, 1990.*