Delayed and Dangerous: Transcaphoid Perilunate Fracture Dislocation

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INTRODUCTION:

Perilunate fracture dislocations are rare injuries easily missed and can result in severe complication¹. Choice of treatment is dependent on duration of injury which can be closed or open reduction with or without internal fixation, arthrodesis and lunate excision. Here, we discuss the management of a 22 years old gentleman with delayed diagnosis of transcaphoid perilunate fracture dislocation and radial styloid fracture with median nerve palsy.

REPORT:

22 years old man with no known medical illness had a fall after skidding his motorbike. Unfortunately, his presentation of transcaphoid perilunate fracture dislocation Mayfield IV with radial styloid fracture was missed in emergency department and was diagnosed later in specialist clinic 1 week later. Examination shows left wrist deformity, pain and median nerve palsy. Operative procedure was delayed because patient was indecisive and did not consent. Finally, after further counselling, procedure was done at 2 weeks post trauma. Carpal tunnel release was done and noted median nerve was not contused. With retraction of median nerve, the lunate was reduced via volar approach. Reduction was fixed with k-wires and belowelbow backslab was applied. Post-operative review noted resolved median nerve palsy and check x-rays showed stable fixation construct and patient was discharged well. Subsequent follow-up at 6 weeks post-operation, fractures in scaphoid and radial styloid had achieved union, thus k-wires were all removed and range of movement exercises were initiated.



Figure 1: X-ray of left wrist shows transcaphoid perilunate fracture dislocation Mayfield IV with radial styloid fracture.



Figure 2: Post operative X-ray of left wrist shows k-wires fixation in transcaphoid, scaphoid-lunate, triquetrum-lunate, triquetrum-hamate, scaphoid-hamate and radial styloid.

CONCLUSION:

Perilunate fracture and dislocations must be detected early and prompt treatment should be initiated. Therapy should aim towards anatomical reduction and stabilizing the injury to prevent complication of chronic pain and extremity dysfunction.

REFERENCES:

1. Herzberg, G. et al. (1993) "Perilunate dislocations and fracture-dislocations: A Multicenter study," The Journal of Hand Surgery, 18(5), pp. 768–779.