

Peri-Lunate Dislocation And Fracture Dislocation Of The Wrist : A Review Of 7 Cases In Hospital Pakar Sultanah Fatimah Muar

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INTRODUCTION:

Perilunate dislocations and fracture-dislocations of the wrist are related to high-energy trauma¹. Perilunate dislocations are relatively uncommon injuries; However, they are the most common form of carpal dislocation . It can be classified as type I to type IV according to Mayfield's classification.

OBJECTIVE:

To evaluate the hand functional outcome following surgical treatment of perilunate dislocations and fracture dislocations of the wrist.

METHOD:

A retrospective series of perilunate fracture-dislocations with and without scaphoid fracture from 1st January 2017 to 31st December 2018. Total of 7 cases were included with 5 involved scaphoid fracture. Other 2 cases are perilunate dislocation only and perilunate dislocation with radial styloid fracture. All patients were treated with open reduction and K wire fixation within 2 days. Scaphoid fracture were treated with 2.4mm headless screw. Patients were reviewed based on Mayo wrist score with a mean follow-up of 6 months.

RESULTS:

Total of 7 patients were studied with the mean age of 29.

	Perilunate dislocation (n=1)	Perilunate fracture dislocation with scaphoid fracture (n=5)	Perilunate fracture dislocation without scaphoid fracture (n=1)	All cases (n=7)
<i>Mayfield classification</i>				
Stage III	1	3	1	5
Stage IV	0	2	0	2
<i>Mayo Wrist Score</i>				
Excellent	1	1	0	2
Good	0	2	1	3
Fair	0	1	0	1
Poor	0	1	0	1

Table 1: Summary of cases.

According to Mayo wrist score, 2(28.6%) achieve excellent, 3(42.9%) good, 1(14.3%) fair and 1(14.3%) poor (**Figure 1**).

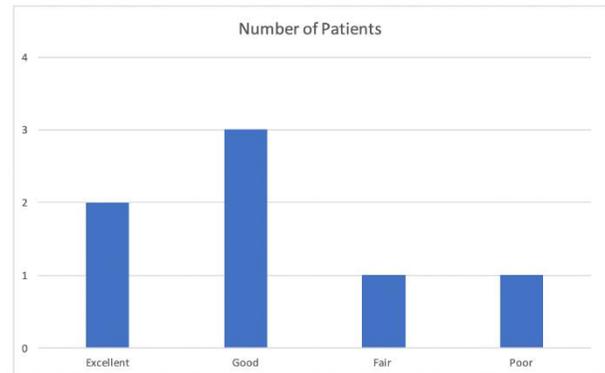


Figure 1: Number of patients with Mayo score interpretation.

DISCUSSIONS:

Perilunate fracture dislocation was first described by Mayfield². Closed reduction has been suggested, however anatomical reduction is difficult to achieve and maintained with cast¹. Surgical treatment with open reduction, ligaments repair, and fixation of the fractures is reported as gold standard². All patients were treated with open reduction via dorsal approach and carpal tunnel release in Stage IV cases. Results in perilunate fracture dislocation with scaphoid fracture were worse and this maybe because of more extended ligamentous injury and scaphoid involvement.

CONCLUSION:Early recognition is important to optimize outcomes as early anatomical reduction can provide satisfactory functional results.

REFERENCES:

- 1). D. Israel. Perilunate dislocation and fracture-dislocation of the wrist. *Orthopaedics & Traumatology: Surgery & Research* 102 (2016) 351–355
- 2). Adnan Kara. Surgical treatment of dorsal perilunate fracture-dislocations and prognostic factors. *International Journal of Surgery Volume* 24 (2015) 57-63