



“Together,
We Can Go Further”

KSES 2026

The 33rd Annual
International Congress of the
Korean Shoulder and
Elbow Society

March
27(Fri) ~ 28(Sat), 2026
BEXCO, Busan, Korea

- Abstract No. : F-0200
- Category : Elbow
- Detail Category : trauma

Morphological characteristics and surgical management of posterior transolecranon fracture-dislocation

Hang Chen¹

chengdu sichuan, , China¹

Introduction and Background

Objective : To explore the morphological characteristics of posterior transolecranon fracture-dislocation, as well as the efficacy of surgical intervention and clinical outcomes.

Material and Method

Methods : The clinical data of 22 patients with posterior transolecranon fracture-dislocation, who were admitted between January 2016 and December 2020 and had complete follow-up, were retrospectively analyzed. There were 14 males and 8 females, with ages ranging from 21 to 69 years and a mean age of 44.6 years. The incidents included three cases of traffic accidents, five cases of falls from heights, and fourteen cases of falls. All of the fractures were fresh and the time from injury to medical treatment ranging from 3 to 96 hours, with an average of 33.3 hours. All cases underwent open reduction and internal fixation. Radial head fractures were treated with screws in 9 cases, plate fixation in 12 cases, and replacement in 1 case. Coronoid fractures were fixed with volar plates in 6 cases, dorsal screws and Kirschner wires in 16 cases. All the proximal ulna fracture were stabilized using an olecranon anatomic locking plate. There were 15 cases treated with simple posterior median approach, 5 cases with posterior median combined volar approach, and 2 cases with posterior median combined Kocher approach.

Results

Results : All the incisions healed by first intention. All patients were followed up for a period ranging from 12 to 36 months, with an average of 19.2 months. X-ray examination showed that all fractures were healed, and the healing time was 12-24 weeks, with an average of 16.4 weeks. No instances of internal fixation failure, ulnar joint instability, or post-traumatic arthritis were observed during the follow-up period. At the last follow-up, 6 patients had developed ectopic ossification, and the elbow function score was 67-100 according to the Broberg-Morrey elbow scores, with an average of 81.6 points. 9 cases achieved excellent Broberg-Morrey elbow scores, 9 cases were good, 4 cases were acceptable, the rate of excellent or good was 81.8%. The DASH scores exhibited a range of 0 to 32, with an average score of 11.6. Meanwhile, the visual analog scale (VAS) demonstrated a range of 0 to 3 and an average score of 0.9.

Conclusions

For posterior transolecranon fracture-dislocations, satisfactory outcomes can be achieved through the application of plates for rigid internal fixation of the proximal ulna, anatomical reconstruction of the coronoid process and radius head using plates and screws, restoration of ulnar and radial length, repair of concomitant ligamentous injuries, and early postoperative active exercise.

