

## **Anterior elbow fracture dislocation with ulnar nerve palsy in a six-year-old child**

### **ABSTRACT**

Background. Anterior elbow fracture dislocation is rare, especially in paediatric age group. Of the reported cases to date, three-quarter were posterior dislocation of the elbow. Anterior elbow dislocation is rarely reported, with incidence of only <2%. Clinical case. A 6-year-old girl presented to casualty with left elbow deformity and pain after she tripped and fell in the toilet. Ulnar clawing was present with reduced sensation over ulnar nerve distribution. No wound was found, distal pulses and circulation were good. The X-rays showed anterior dislocation of the left elbow with olecranon fracture. Closed manual reduction was attempted but failed. Open reduction and percutaneous K-wire insertion under general anaesthesia was performed. Medial approach of the elbow was done. Intra-operatively ulnar nerve was found impinged by the distal ulnar fragment but was in continuity. The transverse olecranon fracture was fixed with two K-wires and the radial head was reduced. Ulnar nerve was mobilised until tension-free. Ulnar collateral ligament was repaired. The elbow was immobilised with a splint. Ulnar claw was resolved at 2 weeks. The fracture heals and the K-wires were removed at 6 weeks. At 8 weeks, range of movement of the elbow was full. The elbow was stable in varus and valgus. Discussion. Anterior elbow dislocation is a high energy trauma and one should be cautious of neurovascular injury. There was no clear recommendation in the literature regarding surgical approach. We chose medial approach of the elbow for ulnar nerve exploration and olecranon fixation. Conclusion. This rare injury should be treated with high index of suspicious. Surgical approach should be tailored individually according to the instability of the elbow joint and neurovascular status, as in this case was the posteromedial instability associated with ulnar nerve palsy.

**Keyword:** Clinical case; Fracture dislocation; Ulnar neuropathies