

# **TRAUMA CASE OF THE WEEK**

**Case Ten**

A 5 year old child fell on an outstretched hand while learning to roller blade and injured his left upper limb. He is a little pale and apprehensive and reluctant to let you look at, let alone touch his left elbow. There are no obvious injuries at any other sites.

- Describe the Xray
- What treatment is required in ED?
- What subsequent care is required?



The Xray shows a so called “Monteggia” fracture. This consists of a fracture involving the proximal third of the ulna together with a dislocation of the radial head. In this case the radial head has dislocated anteriorly. This is obvious when trying to line it up with the capitellum which is the only visible ossification centre in this Xray. This is the most common form of Monteggia but it can dislocate posteriorly or laterally.

As in all acute orthopaedic injuries - seek neurovascular compromise. This is uncommon in this sort of fracture but would mandate early reduction. Traction and reduction of the ulna fracture would probably bring the radial head into place, but they are notoriously unstable, and all need to go to theatre. Otherwise the key ED interventions would be analgesia and splinting. Analgesia would be most easily provided with intranasal fentanyl. At 5 years of age, he is likely to weigh about 20kg so the first dose would be 30mcg (i.e. 1.5mcg/kg). IV cannulation could be delayed until theatre is confirmed.

All Monteggia fractures require specialist orthopaedic care and careful follow-up. In children, as indicated above, an adequate position may be gained by a closed reduction under general anaesthesia, while in adults plating of the proximal ulna is usually required. It is critical to ensure that proper position of the radial head is maintained to minimise chronic problems.