

VAQ 2009.1.6 (XR)

A 25 year old man is brought to your emergency department after a motorcycle accident. His only complaint is severe right arm pain.



- Describe and interpret his X-ray (30%)
- Outline your management (70%)

X-ray showing a comminuted, displaced, angulated fracture of radius with dislocation of the distal radio-ulnar joint. (Galeazzi fracture). The patient will require titrated analgesia, neurovascular assessment, and procedural sedation for interim reduction and immobilisation in a backslab. This will require referral for urgent orthopaedic admission for open reduction/internal fixation. If he has evidence of neurovascular dysfunction not relieved with ED reduction then his orthopaedic care is emergent rather than urgent.

XR right forearm / wrist / proximal hand

radius fracture

between proximal 2/3 and distal 1/3

50% displacement of distal fragment radial and volar

angulation: dorsal approx 30 degrees, minimal in AP plane

distal radio-ulnar joint dislocation with radial shortening at the wrist

marked deformity of forearm evidenced by soft tissues

This injury (fracture distal radius / dislocated distal RUJ) is a Galeazzi fracture

Treatment

Supportive

analgesia

IV morphine 2mg aliquots titrated to pain (or reasonable alternative)

Specific

assessment to guide treatment

skin breach implies open fracture

will require intravenous antibiotics (cephalothin 2g) and irrigation

neurovascular assessment (particularly median nerve distribution)

mandate increased urgency and referral if not resolved with ED reduction

reduction

interim reduction – not definitive

Bier's block or procedural sedation dependent on staff/equipment resources

immobilisation

in above-elbow volar backslab

Disposition

referral for immediate orthopaedic admission

requires open reduction/internal fixation

open fracture or neurovascular compromise require more immediacy