

Upper limb fractures

Most of them result from falling on outstretched arm.

❖ Clavicle fracture

- Middle third fracture is the most common. Lateral third fracture is unstable.
- Proximal piece moves cranially (pulled by sternocleidomastoid) and the lateral piece moves caudally (pulled by the arm weight).
- The most common complication: malunion.
- Treatment: Conservative (if middle) or operative fixation (if lateral).



❖ Proximal humerus fracture

- Surgical neck fracture is the most frequent and considered a fragility fracture.
- Anatomical neck fracture >> Risk of avascular necrosis.
- Greater & lesser tubercle fractures >> avulsion fractures.
- Risk of **Axillary nerve** injury (around surgical neck).
- Treatment: Conservative or surgical fixation.

Another fragility fractures:

Hip fracture, vertebral compression fracture, distal radial fracture.

❖ Humeral shaft fracture

- Risk of **Radial nerve** injury (at distal shaft) >> wrist drop.
- Treatment: conservative or surgical fixation (liked ORIF by compression plate).
- Supracondylar fracture: fracture at the distal humerus proximal to epicondyles.



❖ Olecranon fracture

- Intra-articular fracture >> anatomical reduction & absolute stability.
- It is an avulsion fracture (by forcefully pull the triceps).



❖ Forearms fracture

- Like intra-articular fracture, treated by anatomical reduction & absolute stability (except in children; high rate of remodeling).
- Usually fractured together, isolated fracture may occurs.



❖ Monteggia Fracture dislocation

- Proximal 1/3 ulnar fracture & dislocation proximal head of the radius.
- Risk of **Radial nerve** injury (around radial neck) >> fingers drop at MCP.
[no wrist drop; nerve supply to the extensor carpi radialis longus originated proximal to the injury site].



❖ Galeazzi Fracture Dislocation

- Fracture in the distal radius & distal ulnar dislocation.
- Risk of **Ulnar nerve** injury >> weak finger abduction & abduction and Froment's sign.



❖ Isolated ulnar fracture

- Also called nightstick injury.
- Result of direct trauma to the ulna.
- High risk of non-union >> surgical fixation if conservative treatment fails.



❖ Colles' fracture

- Distal radius extra-articular fracture, fall on extended wrist.
- Occurs in the elderly after a simple trauma (fragility fracture).
- Presents with wrist swelling called dinner fork deformity.
- Treatment usually closed reduction and casting for 6 weeks.



❖ Smith's fracture

- Distal radius extra-articular fracture, fall on flexed wrist.
- Also called reverse Colle's fracture; as it has the same features but with volar angulation.
- Treatment usually closed reduction and casting for 6 weeks.



❖ Barton's fracture

- Intra-articular fracture (radio-carpal avulsion fracture), fall on extended wrist.
- Resembles a triangle (articular surface, fracture, cortex).
- Treatment is anatomical reduction and fixation.



❖ Radial styloid fracture

- Also called chauffeur fracture, intra-articular fracture
- Caused by sudden forceful radial deviation of the wrist.
- Treatment is anatomical reduction and fixation.

