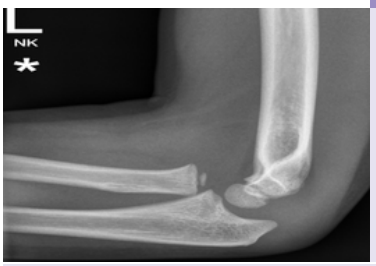
Queensland Children's Hospital

Emergency Department Clinical Resource

# Nine Not-to-miss Paediatric Orthopaedic Pearls

## Forearm Fractures



In forearm fractures, always ensure that the radial head is not dislocated. Remember: where one forearm bone is fractured there is frequently a second fracture or joint dislocation.

**Radial head dislocation: There is disruption of the radiocapitellar alignment with superior displacement of the radial head and associated joint effusion**

Case courtesy of Yusra Sheikh, Radiopaedia.org, rID: 72160

## Non Accidental Injury



Never forget possibility of NAI, especially in unexplained injuries, and delayed presentation of non-mobile infant

**Metaphyseal corner fracture**

Case courtesy of Hani M. Al Salam, Radiopaedia.org, rID: 13614

## Spinal Discitis

Spinal discitis can present as fever, abdominal pain and refusal to walk or difficulty with sitting in young children. Always be suspicious of pathology in a previously mobile child who is reluctant to walk or move

## Seymour Fracture



Crush/hyperflexion injury to the distal phalynx - always consider nailbed injury. These fractures are treated as an open fracture.

**Seymour fracture; open fracture distal phalanx with dorsal angulation and displacement**

Case courtesy of Francis Deng, Radiopaedia.org, rID: 71967

## Supracondylar elbow fractures

Supracondylar elbow fractures have a high rate (15%) of neural injury, Always examine and document neurovascular status.

## Hip disorders

Hip disorders can present with groin, thigh or knee pain in 15% of cases. Think Slipped Upper Femoral Epiphysis (SUFE) or Perthes and image both hips and pelvis. If considering SUFE, order a frog leg view



**Left side SUFE :** A line drawn up the lateral margin of the left femoral metaphysis does not intersect the epiphysis on the AP view (line of Klein). The right side appears normal.

Case courtesy of Frank Gaillard, Radiopaedia.org, rID: 7688

## Knee injuries



In paediatric knee injuries, fractures are more common than sprains. Image to exclude avulsion fractures and tibial plateau injuries. Lipohaemoarthosis is an important sign of potential underlying fracture.

**Segond fracture and tibial spine avulsion fracture associated with ligamentous injury.**

Case courtesy of:
https://eurorad.org/case/7594DOI:10.1594/EURORAD/CASE.7594ISSN:1563-4086

## Lisfranc injury

Consider Lisfranc injury if mechanism is axial load with forced plantar flexion, with swelling and plantar bruising. Order weight-bearing plain films or CT scan if considering diagnosis.

**Lisfranc fracture:** Minimally displaced fracture of the base of the second metatarsal with associated widening of the intermetatarsal space in keeping with a Lisfranc fracture dislocation.

Case courtesy of RMH Core Conditions, Radiopaedia.org, rID: 33630



## Ankle Fractures



Ankle fractures can occur with low energy mechanism in adolescent children with partial growth plate fusion. Look for Tillaux and triplanar fractures.

**Tillaux fracture:** xray shows a mildly displaced fracture of the distal tibial epiphysis with an extension of the fracture through the anterolateral growth plate.

Case courtesy of Faisal Shadab, Radiopaedia.org, rID: 168812

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