

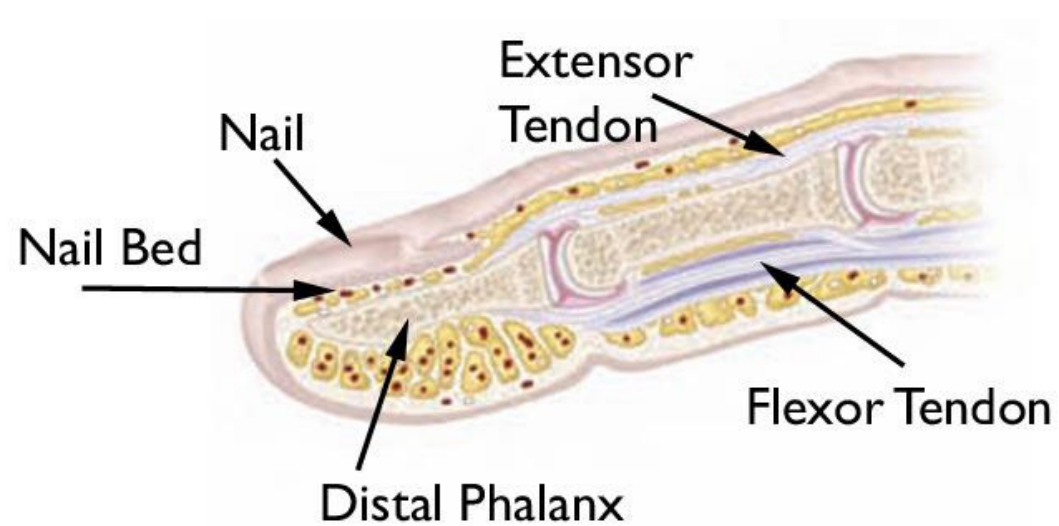
Distal Phalanx Injuries:

What are indication for operative management?

Mechanism of Injury: Crush type of injury

Associated injuries: Distal Phalanx Fractures, FDP Injury , Terminal Extensor Tendon injury,
Nail Bed Injury, Skin Defects

Indication for Conservative Management



- Nail plate intact + no damage to the nail bed
- Subungual haematoma <50% of nail plate
- No flexor tendon involvement (DIPJ flex)
- +/- Terminal extensor tendon injury (DIPJ extension)
- +/- DP fracture
- No open wounds/foreign body that increase risk of infection



Management:

- Protective splint if there is a DP fracture (see photos)
- If there is no fracture and no tendon involvement, begin movement within pain
- If terminal extensor tendon is involved, splint DIPJ into neutral extension and **refer to a ULQ specialist or hand therapist for review.** This injury may or may not require surgical management. Refer to ULQ newsletter on "Zone 1 extensor tendon injuries"

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Indication for Operative Management



Compound DP Fracture

Refer to ULQ specialist immediately if:

- Subungual Haematoma >50% of nail plate
- Nail plate avulsed/dislocated, nail bed loss and/or skin defect (dorsal or volar)
- Seymours Fracture (see below)
- +/- Extensor tendon involvement (DIPJ extension)
- FDP tendon involvement (DIPJ flexion)
- Compound Distal Phalanx Fracture
- Vascular Disruption
- Foreign body or Infection



Volar DP skin defect



FDP Tendon Avulsion

Primary Care Management:

- Use nail plate (if available) to protect the nail bed + use a non-adhesive dressing (i.e mepitel)
- Immobilise DIPJ in neutral with DP fractures and/or terminal extensor tendon injuries
- If FDP is damaged, immobilise with a dorsal extension back slab with fingers and wrist included
- Comminuted DP fractures may need stabilisation with k-wire (see photo)



Nail Plate Dislocation

Seymour Fracture :

Paediatric Nail Bed Injury + Displaced DP Fracture

- Metaphyseal fractures distal to the epiphyseal plate
- Salter-Harris 1 + 2 fractures

Open fracture despite benign appearance and requires fracture debridement and nail bed repair



Seymour Fracture:
Paediatric DP Fracture +
Nail Bed Injury



K-Wire Fixation of DP #