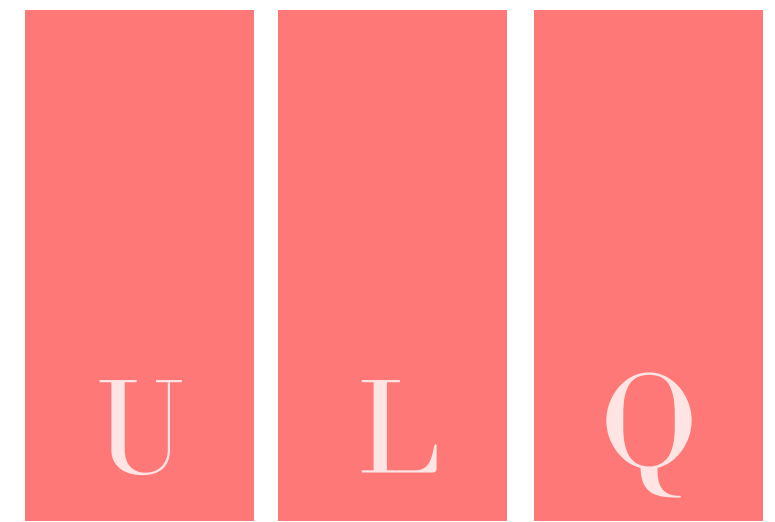


UPPER LIMB QUEENSLAND

24/7 Hand, Wrist, Elbow + Shoulder
Trauma Service



Case Study: Right Index Finger vs Circular Saw

Mechanism of Injury:

Circular saw slipped and lacerated the volar proximal phalanx of the dominant index finger

Damaged Structures:

Flexor Digitorum Profundus + Superficialis laceration,
Proximal Phalanx Fracture + Large Skin defect



Considerations in Primary Care:

Circulation:

The finger is well perfused, pink, turgor, good inflow and no congestion

Can be assessed by pricking the finger tip with needle if you are concerned with circulation BUT avoid needles that may injure the digital arteries

Neurological:

Assess neurovascular bundles - check sensation on both side of the finger

Wound:

The skin severely traumatised

Good pictures of the finger (dorsal and volar) before dressing are useful for the ULQ surgeon

Use non-stick dressing such as mepitel

Immobilise in a resting plaster

Fracture:

Assess bony injury with plain x-rays and potentially CT scan if time permits. This helps with operative planning.

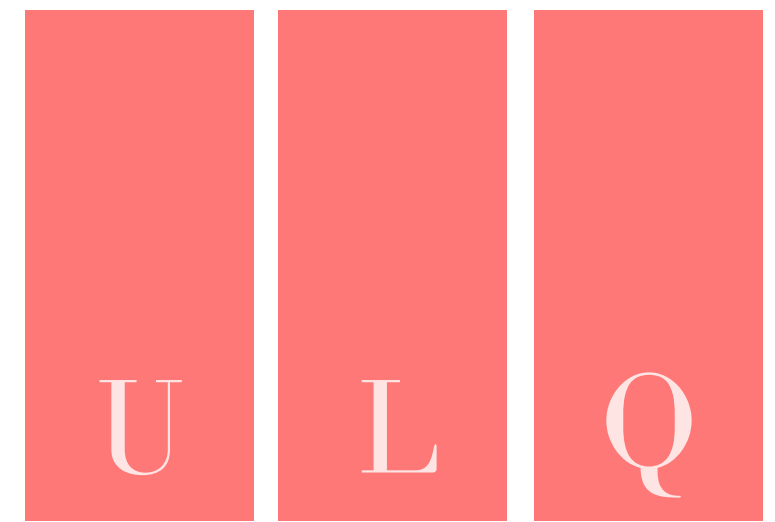
This patient had a highly comminuted proximal phalanx fracture

Patient expectation:

Reconstruction vs Amputation - let this discussion happen between the surgeon and patient to ensure patient expectation will be met

UPPER LIMB QUEENSLAND

24/7 Hand, Wrist, Elbow + Shoulder
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Case Study: Right Index Finger vs Circular Saw

Operative Management



Proximal Phalanx Fracture:

The comminuted fracture was fixed with multiple lag screws

FDS/P Tendon:

Both tendons were repaired using 6 strand suture techniques

Skin Defect:

A Quaba Flap was used to cover the skin defect

This flap is based on a dorsal metacarpal artery



One year post surgery:

This patient regained full extension, flexion, had a functional pinch grip and his grip strength was 31.3 kg

