Joint Dislocations

Shoulder

See separate article.

AC Joint

Grade I: Partial AC ligament tear. CCL intact. No subluxation (ACJ space 4-6mm). Normal on XR. Grade II: AC torn. ACJ sublux<1cm. Norm coraco-clav dist (<13mm). Clav elevated ≤50% Grade III: AC & CC ligs torn. ACJ subluxed>1cm. Coraco-clav dist >13mm. Clav elevated >50%. Grade IV: As III but with posterior displacement of clavicle relative to acromion. Button holes through trapezius.

Grade V: Clavicle widely displaced superiorly

Grade VI: Rare. Inferior displacement of clavicle below acromial process or coracoid process Mx: Grades I & II: sling, NSAIDs, rest. Grade III may need ORIF. Grades IV-VI \rightarrow ORIF.

Sternoclavicular (uncommon)

Anterior.: More common. Magnified clav head on XR. CT advised. Closed reduction + sling 2-3wk. Posterior: Risk of great vessel/airway injury. Do CT. Reduce under anaesthesia.

Elbow

Usually posterior following fall with hyperextension of abducted arm \pm med or lat component. 33% have assoc #, <10% have brachial artery injury, rarely nerve injury.

Reduce under sedation/GA - traction/thumb push. Long POP x 2-3wk.

Pulled elbow in children: radius from annular ligament. Reduce: supinate/pronate ± flexion.

Wrist

Radiocarpal joint: forceful dorsiflexion dislocates lunate, scaphoid & triquetral. Reduce in OT. *Lunate:* dorsal or volar disloc, concavity always faces volar aspect. Median n. risk. May need OT. *Trans-scaphoid perilunate disloc:* Assoc # scaphoid ± radius & ulna. May need OT reduction.

Fingers

XR (confirm disloc, ?#), analgesia, nerve block (metacarpal or ring). If involves thumb \rightarrow spica. *MCPJ*:

- Simple disloc: phalanx at right angles on dorsum of MCPJ. Traction & push back.
- Complex disloc: phalanx parallel to MC, trapping volar plate. Often need open reduction.

PIPJ: Usually dorsal (but still may have volar plate injury). Traction + sl hyperextension. Strap. *DIPJ:* Open disloc common. Reduce with traction + hyperextension.

Hip

Posterior Dislocation

- More common (80-90%), esp prostheses, major trauma (dashboard)±acetabulum injury
- Classically shortened, adducted & internally rotated
- If not prosthesis, AVN risk so early GA reduction.
- 10% sciatic nerve injury.
- 5% femoral head #

Preferred reduction method (Allis): Patient supine. Assistant fixes pelvis with pressure on ant iliac crests. Dr stands on bed. Flex hip & knee to 90°. Dr grips ankle between knees for extra traction. Pull up & rock as shown. \pm Lat traction to proximal femur. Admit if 1st disloc. Anterior Dislocation

- Also from MVA, but ext rot, abducted & flexed.
- Occ femoral artery/nerve injury.
- XR shows femoral head inf-med to acetabulum.
- Reduction under GA

Knee

Requires considerable force & indicates severe injury. 20-30% are open.

Assoc with multiple lig injuries, #, popliteal vessel damage, peroneal nerve injury.

High risk distal compartment syndrome

66% spontaneously reduced before ED. Otherwise longitudinal traction+sedation/analgesia.

Patella

Most common in adolescents and more common in girls.

Usually caused by a twisting injury or a direct blow, with the knee in slight flexion Usually laterally. Reduction: N_2O . Distract patient & push medially whilst rapidly extending leg. POP or Zimmer for 2-4wk

30% recurrent

Ankle

Quite common, most often with significant ankle fractures.

Reduce urgently if vascular compromise. Analgesia/conscious sedation. Distract usually with plantar flexion/inversion then traction to oppose deformity.

Hold foot by toes against gravity to prevent subluxation whilst applying POP.

Tarsal

Subtalar: foot usually inverted & int rotated. Often open. Usually needs GA. Lisfranc : See Ankle & Foot Fractures.

