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Ankle instability

Occurs as a result of repetitive lateral ligament sprains, and presents with ankle giving way without warning or on uneven ground. The ligaments involved are ATFL which prevent ankle inversion when the patient is on tip-toes and CFL which limits inversion when the ankle is in a neutral position. May also be associated with ligamentous laxity

What to ask in the History

- Previous trauma – inability to weight-bear for a prolonged period may suggest associated osteochondral lesion (OCL) of the talar dome
- Number of instability events and usual precipitants
- Sequence of event – giving-way then pain suggests mechanical (ligamentous) cause, whereas pain then a feeling of instability may be functional, as a result of intra-articular pathology such as an OCL
- Pain – Suspect an OCL if there is pain between episodes of instability
- Swelling – usually lateral. Global suggests ankle joint pathology
- Treatment – physiotherapy, bracing/taping, analgesia

What to look for on Examination

- Lower limb alignment – genu varus or a cavo-varus ankle predispose to instability
- Lateral swelling
- ROM and joint-line pain of the ankle joint
- Pain to palpation – over the ligaments or in the sinus tarsi
- Laxity – anterior drawer for ATFL and ankle inversion for CFL. Compare both sides!
- Coleman block test if cavovarus deformity – block under lateral foot while standing to determine if forefoot driven
- Generalised Ligamentous laxity – Beighton & Soloman classification

What investigations to order

- Standing AP/Mortise and lateral ankle Xrays – exclude OCL
- Ultrasound – looking for lateral ligaments thickening, peroneal tendon tears and sinus tarsi inflammation
- MRI – looking for all above

How to treat

- Physiotherapy – work on peroneal muscle strengthening, proprioception, ultrasound for swelling
- Bracing – pharmacy, online or orthotist
- Orthotics – lateral posting/recessed 1st ray if correctable cavovarus
- NSAIDS
- Cortisone injections – sinus tarsi syndrome

When to refer

- Recurrent instability
- Suspicion of OCL
- Cavovarus deformity

What the surgeon may do

- Anatomical ligament reconstruction – Brostrum-Gould procedure
- Correction of cavovarus deformity
- Ankle arthroscopy – debridement/microfracture of OCL