



Metro North Hospital and Health Service *Putting people first*

Common Challenges in Primary Care – Fracture Management

Thursday 11 October 2018

Dr Mark O'Brien Auditorium, The Prince Charles Hospital

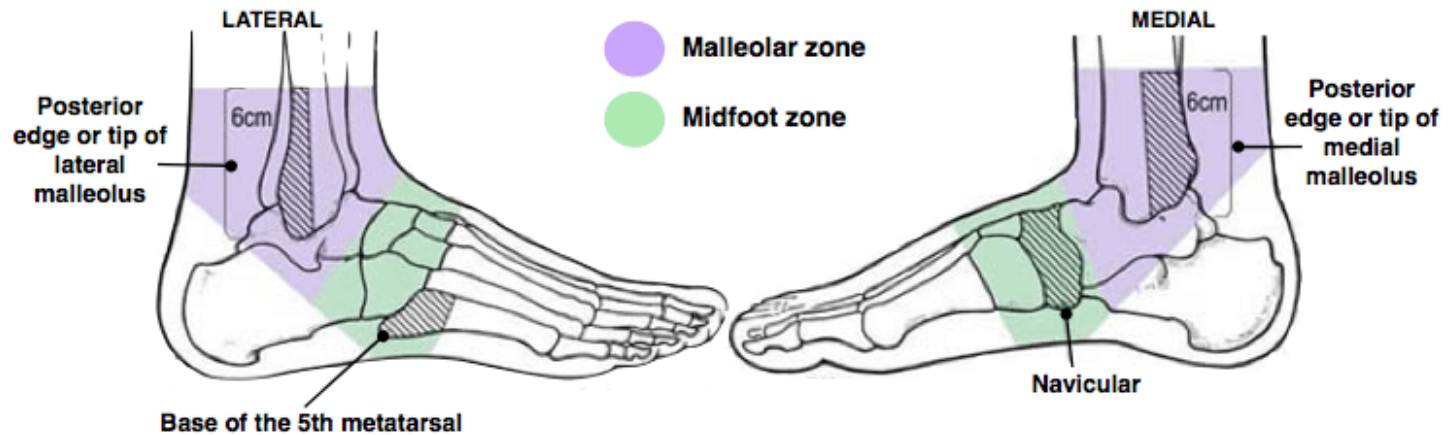
V 1.0 Effective: 11/2018 Review: 11/2020

- Richard Hanly
- BPhy (Hons), MBBS, FRACS (Ortho), FAOA
- Appointments;
 - RBWH Deputy Director Orthopaedics
 - TPCH Staff Specialist Orthopaedics
 - Consultant Surgeon Wesley Hospital
- Lower Limb Surgeon
 - Hip & Knee Arthroplasty
 - Robotic assisted surgery
 - Complex primary Surgery
 - Revision Surgery
 - Foot & Ankle
 - Advanced Arthroscopic Techniques
 - Sports & Reconstructive Surgery

Management of Fractures of the Ankle Complex

- Ottawa ankle rules
- CROSSBAT study
- Ankle sprains
 - When to image & how
 - When to refer

Ottawa Ankle Rules



An ANKLE radiograph should be performed if there is pain in the malleolar region with any of the following:

Bone tenderness at the posterior edge of the distal 6 cm or the tip of the lateral malleolus

Bone tenderness at the posterior edge of the distal 6 cm or the tip of the medial malleolus

Inability to bear weight for at least 4 steps both immediately after injury and at the time of evaluation

A FOOT radiographic series should be performed if there is pain in the midfoot region with any one of the following:

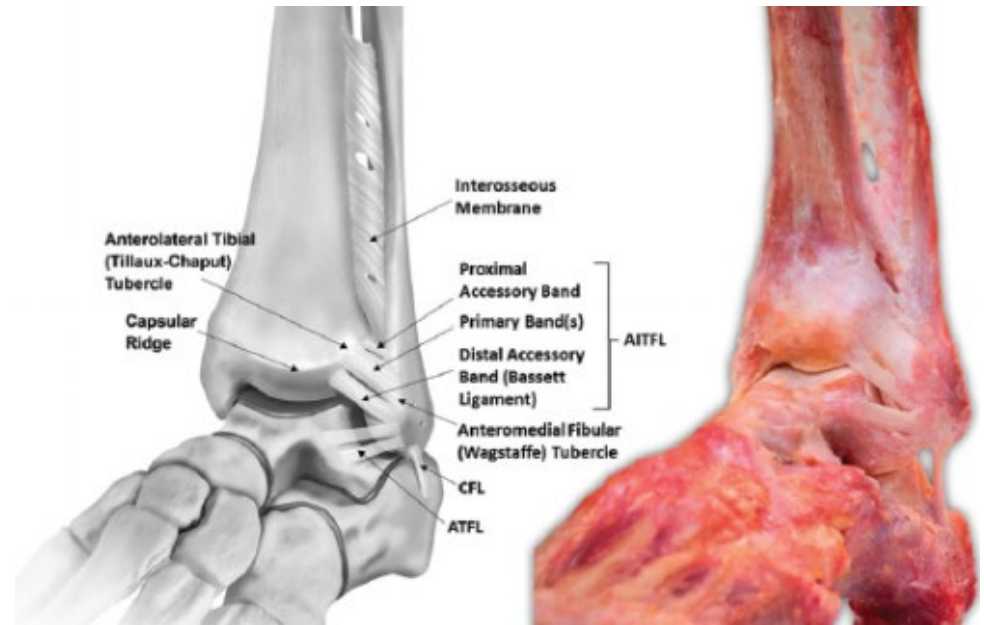
Bone tenderness at the navicular bone

Bone tenderness at the base of the fifth metatarsal

Inability to bear weight for at least 4 steps both immediately after injury and at the time of evaluation

Ankle Fractures

- Common - 1/800 people per year
- Categories;
 - Fibula +/- Tibia
 - Relative to syndesmosis
 - Displacement
 - Open/Closed
- Aircast boot



Open Access

Research

BMJ Open Surgery for Type B Ankle Fracture Treatment: a Combined Randomised and Observational Study (CROSSBAT)

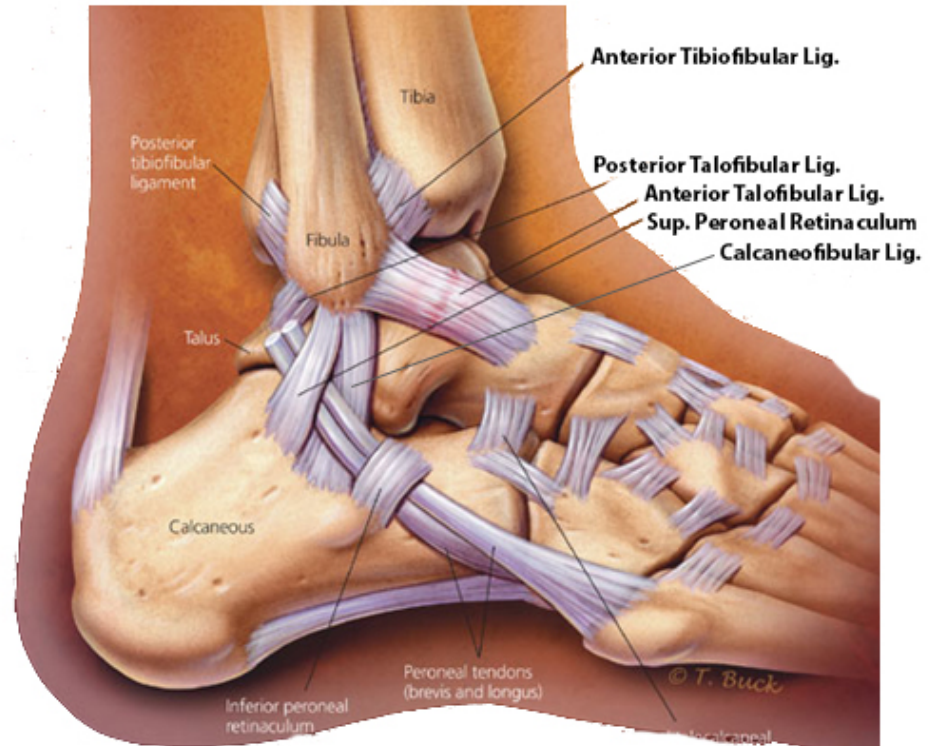
Rajat Mittal, Ian A Harris, Sam Adie, Justine M Naylor, for the CROSSBAT Study Group

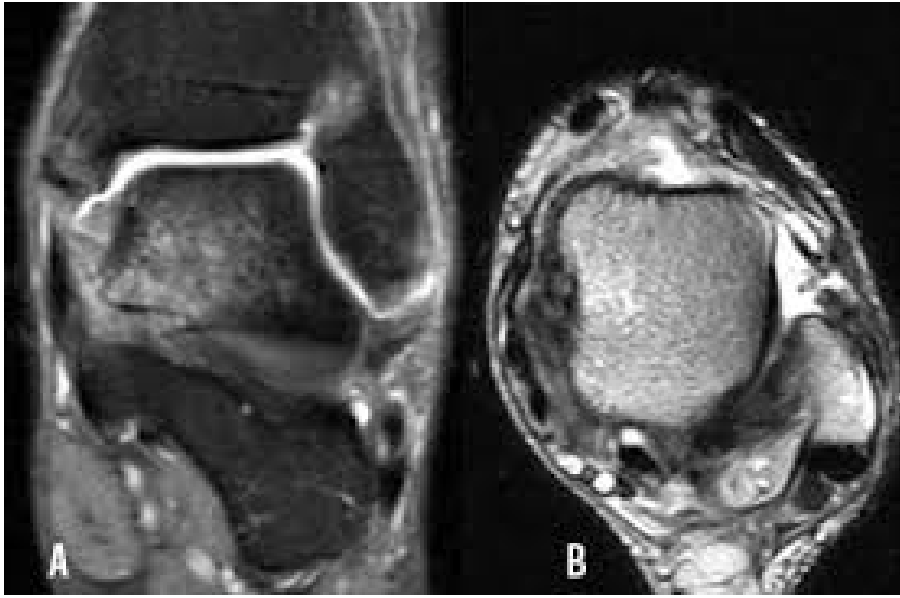
Charcot Neuroarthropathy

- Rare
 - Diabetes most common etiology
- Minimal trauma
- Painless
- Red/swollen
- Erythema resolves with elevation of cellulitis doesn't resolve



Ankle Sprains





Ankle Sprains

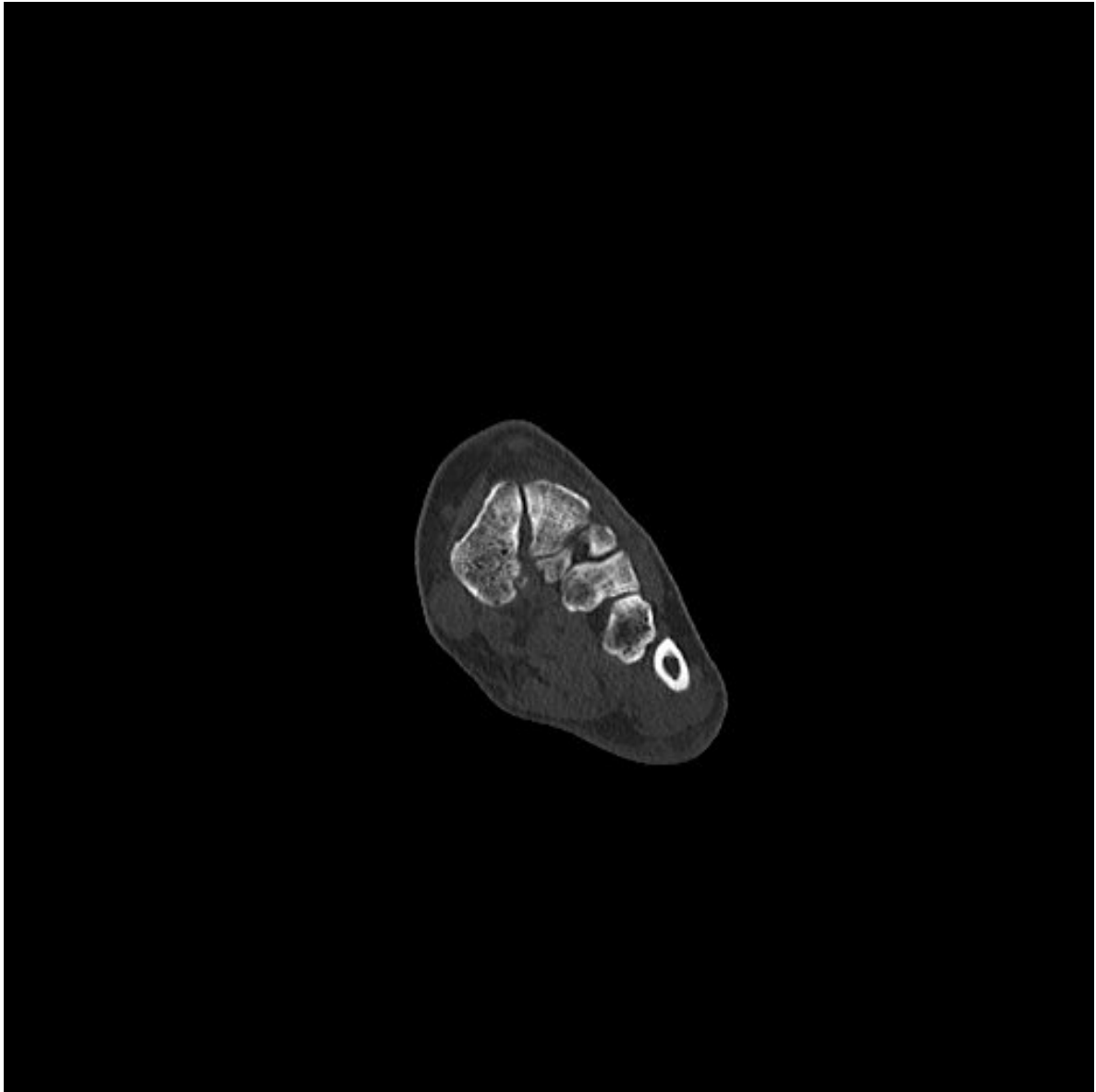
- Look, Feel, Move, Xray
 - 85% will improve with Physiotherapy & time
- Weight bearing Xray
- If tender over syndesmosis – MRI
 - Syndesmosis involvement is uncommon
 - Treatment; Boot vs Surgical fixation vs Reconstruction
- If fail to progress by 6 weeks – MRI
 - Occult chondral injury or evolving OCD

Management of Foot Fractures

- The Lisfranc complex
- Metatarsal fractures
- Toe fractures

The Lisfranc Complex





Metatarsal Fractures

- Mostly non-operative management
- Overall alignment is crucial
 - Plantar prominence = metatarsalgia
 - 1st and 5th metatarsal provide lateral splints
- Beware of lateral beaking = stress fracture
 - Underlying malalignment
 - Neuropathy
 - Prolonged healing time



Toe Fractures

- If toe appears to be aligned it likely is
- Symptomatic management
- Buddy strap toes
- Allow to weight bear in post-operative shoe
- Fusion of IP joints more reliable outcome than fixing intra-articular fractures

Summary

- History & Clinical Examination is key
- Weight bearing Xrays
- Advanced imaging if fails to progress
- Index of suspicion
 - Charcot
 - Syndesmosis
 - Talar OCD
 - Lisfranc
 - 5th MT stress fracture

Questions

