

Medicolegal Aspects of Foot and Ankle

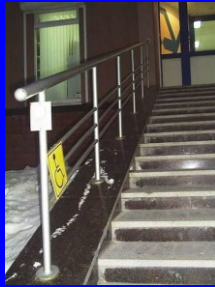
Bob Sharp

Consultant Orthopaedic Surgeon
Oxford University Hospitals and Manor Hospitals Oxford.

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Overview

- Trauma
 - Common injuries
 - Negligence
- Elective
 - Common claims
 - Consent
- Diabetes
 - Ulcers, infection, Charcot



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Trauma

- Acute
- Chronic
 - outcomes
 - CRPS
 - Arthritis
 - morbidity



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Trauma; Commonest

- | | |
|-----------------------|-----------------------|
| • PI | • Negligence |
| • Ankle fractures | • Achilles |
| • Pilon Fractures | • Ankle fractures |
| • Calcaneal fractures | • Pilon |
| • Lisfranc Fractures | • Lisfranc |
| | • Calcaneal fractures |

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Fractures- ankle

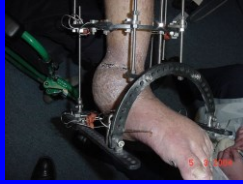
- Classifications
 - Weber, Lauge Hansen
- Treatment pop/brace
- surgery
 - ORIF
 - Frame
- 0-6/52 in pop, 4/12 to get life back
- Otbop few problems
 - Rate of OA unknown really



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Bad ankle fractures

- Open
- Posterior fragment
- Lots of bits
- “Pilon”
- High energy
- Plastic surgeons



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Acceptable outcomes

- Most do fine
- Infection
 - Antibiotics?
- Stiffness
- Non union
- Malunion
- CRPS/ nerve
- Initial management
- Follow-up
 - May need revision surgery
- When is a fracture healed?
- Risks of POP and treatment

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Outcomes Ankle Fracture

- Most Ok
- Many patients have a residual ache and never normal
 - May need further treatment eg scope, r/o metal
- Arthritis depends on injury
- Osteochondral lesions
 - Have damaged cartilage at the time



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Poor outcomes

- May need surgery
- Time buying procedures
- Definitive
 - Ankle fusion
 - Ankle replacement
- Secondary affects
 - Arthritis other joints



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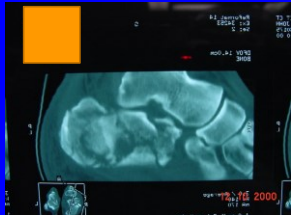
Osteochondral

- Damage to cartilage
- Body can't mend cartilage
- Outcome decided one millisecond after injury
- Lots of unsuccessful claims
- Only diagnose it on MRI/CT later

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Negligence Problems

- Missed fracture
 - Ottawa, ENPs, Xrays
- delayed presentation/Rx
 - affect of time????
- Nerve pain (CRPS)
- Other injuries often missed
- "bad surgery"
 - Syndesmosis
 - Reduction
 - pilon



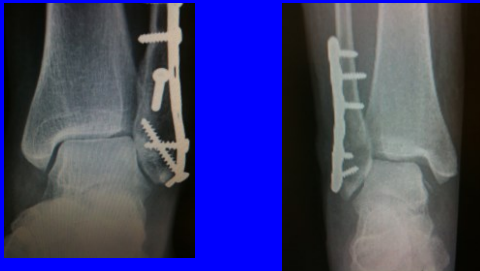
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Ankle fracture negligence



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Ankle fracture



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Ankle fracture negligence



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Fractured talus

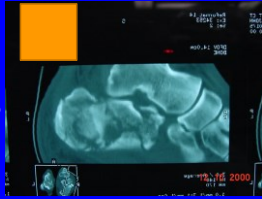
- Bad bad bad injury
 - Leg losing
- PI Claimants massive pay out
- Negligence hardly ever for treatment
 - Except often missed
- Lesser fractures
 - Osteochondral, process fractures



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Fractures- calcaneum

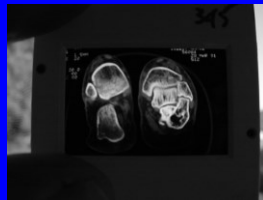
- Heel bone (calcaneum)
- Do badly
- Surgery probably no help for most
- Often missed
- Often present late
- Outcomes poor



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Fractured calcaneum

- End result is a stiff joint
 - Disaster roofers/scaffolders/hill walkers
- Arthritis
- “fusion”
- 10% do badly
 - Common complications
 - CRPS
 - Unexplained nerve pain



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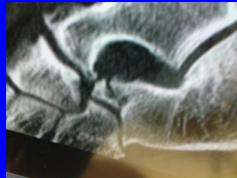
Calcaneum fractures

- Misunderstood by patient
- Big disability
- Treatment is unlikely to have been negligent even if missed
 - Were going to badly anyway?
 - Lots of infections/bad outcomes/amputations
 - Diagnosed late but no affect on outcome?

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“Process” fractures

- Anterior process calcaneum
 - Bad injury. Do badly
- Lat process/ medial process/ post process talus
 - Hard to diagnose
 - A and E cant scan everyone
 - We don't know how many there are



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Sprains slips and trips

- Sprain
- 99% fine
 - Full recovery
- But may get
 - Pain
 - Instability
 - Crps
 - Missed other injuries



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Ankle "Sprains"

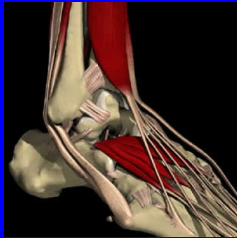
- 1 million a year
- Exclude Fracture (break) "ottawa rules"
- Difficult if a GP/A&E
 - If they've documented rules is it negligent?
 - Few days delay probably irrelevant other than P & S
- Most sprains resolve with no residual symptoms



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Sprains

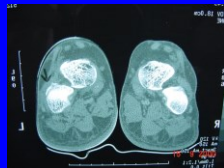
- Exclude fractures
 - Ankle
 - 5th MT
 - Talus
 - Syndesmosis
 - Calcaneum
 - Anterior process
 - ACHILLES



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Missed fractures

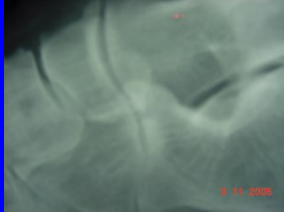
- Lots of associated injuries
- Difficult to see on xray
- Cases rests on adequate documentation and radiographs and significance
- Many fractures only diagnosed late; not negligent??



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sprains

- Anterior process
- Difficult
- A&E miss
- Ct/mri
- Poor outcome from innocuous injury
- Patients sue +++
- Usually not negligent just difficult to see



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Sprains

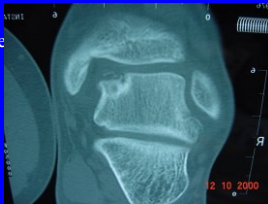
- Pain = osteochondral
- Instability= loose body/OC or ligament
- Neither of these can be diagnosed in A&E and even if they were we are unlikely to treat for 3/12



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Osteochondral again

- Bone-cartilage
- Body can't repair cartilage
- Neither can doctors
 - Massive research
- May be asymptomatic or debilitating pain
 - Nobody knows why
- Patients often sue- unsuccessful



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“sprains”

- Jones fracture
- Bad injury
- No definitive answer for treatment
- Often missed
- Patients sue
 - Ottawa rules
 - X-rays



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DON'T FORGET

- ACHILLES
- ACHILLES
- ACHILLES



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ACHILLES

- Acute
 - 40 yr old squash
- Usually however
 - “sprain”
 - “ankle went”
 - “Other injury”
 - “run beach”
- SIMMONDS TEST
- CHRONIC
 - KNACKERED TENDON
 - Goes sequentially
 - Never pick it up

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achilles

- Acute
- Early treatment= good results
- Late= disaster?????
 - Most actually do fine
- Biggest claim frequency
- Chronic
- Bad outcome anyway
- Difficult to make claimants understand

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instability

- Torn ligaments
- Ankle gives way whole time
- Rough ground high heels
- Operation to fix if not resolve 95% success
- EARLIER TREATMENT???



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Midfoot stress fractures

- Rare in civilians
- Can only diagnose scans
- Huge pay outs if wrong
 - Pro footballers
- Army 6% trainees
- Standard of care???



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Lisfranc

- Rare?
- Bad outcomes
 - LISFRANC
 - Napoleons surgeon
 - Massive swelling
 - Weeks off foot



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lisfranc

- Outcome bad
- Better if treated early?
 - Fusion best outcome in 1 paper!!!!!!!
- Usually missed (1/3)
- Difficult
- Common medicolegal case
- Ct/mri
- Gp faced with “normal Xray report”



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Metatarsal fractures

- Usually few sequelae
- Rarely treated
- Unlikely negligent even if shockingly bad
- Difficult to restore if bad outcome initially



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Compartment Syndrome

- Common
- Tibial fractures
- ITU
 - Paralysed/coma
- Monitoring poor
- Outcomes bad



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Compartment syndrome

- Negligence???
- Notes
- Frequency
- Suspicion
- Common sense
- Measuring systems
- Many trauma units will release anyway
 - Increased infection
- Dead everything
 - Need surgery to reconstruct
 - Infection
 - Loss of limb

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Crush Injuries

- Do badly whatever you do.

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Trauma and Time to treat

- Theatre delays
 - Negligence??
- Presentation/diagnosis delays
- Multiple attendance rare fracture
- Resource limitations
- “helped old lady clear gutter, fell, waited 6 hrs A&E 6 hrs, sent home”
- Notes show “jumped window pissed, punched matron self discharged”

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Elective surgery

- Infections
- Bad outcomes
- Disasters
- Podiatrists
- consent



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infections

- 1-10%
- 40% trauma open
- Diabetic/vascular/poorly
- How diagnose?
 - Often low grade
 - Rheumatoid/immunosuppressed
 - No test absolute
- Laminar flow theatre reserved for clean cases

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Infections and antibiotics

- Large meta-analyses in joint replacement proving a/b lower infections
 - Despite this recent bofas majority not using in forefoot!!
 - Podiatry literature shows increased infection!
- Pre op and intravenously
 - Podiatry give oral antibiotics if at all
 - Single shot as good as continued
- Infections come from wards???
- What is the standard of care???????????

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Antibiotics and established infection

- Cochrane review
 - No evidence for duration of antibiotics
 - Parachute trial
- Most centres would follow Cierney and Mader regime or Oxford regime
 - 6/52 iv 6/52 oral at least but little if any evidence
- Debridement, foreign material
- Often suppress infections as we know we may not be able to cure

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Diagnosis?

- Difficult ?
 - Case 1 26 visits over 12 months with fluid pouring out of wound, fevers temperatures and rigors. No tests investigations, wound dressings. Admitted to hospital .died. Case defended
 - Case 2. Hindfoot op. Slightly red wound. Gp antibiotics . Resolved. 3 months later infected.

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Gold Standard?????????

- Admit
- Image MRI
- Sample off antibiotics
- Debride
- Antibiotics iv +++++
- But most don't
 - What is negligent???

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forefoot

- Wrong site surgery
- Metalwork
- Old operations
- recurrence



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Bad outcomes

- Bunions
 - 10% worse
- Midfoot
 - 40% same/worse
- Plantar fascia
 - 50% of the 50% you've "cured" wouldn't have it done again



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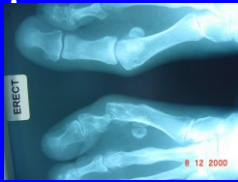
bunions

- 200 ops
- Infections
- Recurrence 4%
- 10% poor outcome
- Nerve pain
- R/o metal
- Arthritis
- Transfer pain
- Under/over toe



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bunions



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Bunions gone wrong



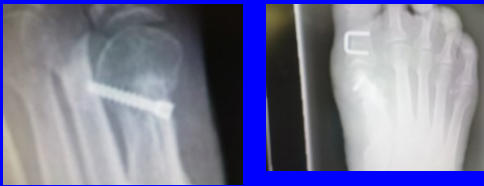
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Bunions- the sequel



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Bunions-3d



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Bunions- the next generation



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bunions

- Frequent complications
 - Stiff
 - Recurrence
 - Infection
 - Poor outcome
- Rare complications
 - Avn = dead bone
 - Dead sesamoids



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Lesser toes

- 10% fail
- 10 toes!
- Adequate consent?
- Mortsos neuromas
 - 4% worse
 - "Wrong site"
 - Plantar incision???



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midfoot

- Bad surgery
-

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hindfoot

- Non unions
 - 4 to 40%
- Infections
 - 1 to 10%
- Not better
 - 10%
- Ankle replacements
 - Not much data
 - 4 back to front



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Bad surgery

- When is bad negligent?
- Do outcomes = xrays
 - 5 patient negligence



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podiatry

- Only country in world except US where non does can operate
- My unit has surgical podiatrists, fantastic.
- ? trained
- ? audited
- appraised
- antibiotics?
- anaesthesia?
- Xrays?
- How assess negligence?
- regulation?
- responsibility?
- indemnity?
- 15 cases against 1
 - 60 on file

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CRPS

- Pain
- Syndrome= we havent got a clue
- RSD
- Algodystrophy
- Sudecks
- How prove?
- 1:1500



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Consent

- “There’s no such thing as a brave surgeon, just a poorly consented patient”
- Senior colleague
 - “ may not work, may be worse, may be a lot lot worse, dead or worse”

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Consent

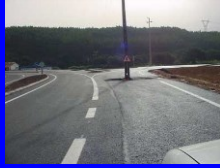
- Nobody remembers
 - 3 things
 - Usually not relevant
 - Is anyone consented
 - Does anyone decline surgery
- Commonest thing is one specific thing missed out



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Consent

- 1% rule unless serious????
 - Everything can lose leg or kill you
- Everybody knows can go wrong don't they?
- Give information sheet can they prove it?
- "patient warned of risks and complications"
- In 23 years no one ever cancelled op specific complication risk



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Compliance

- Patients only retain 3 facts
- Poor recollection
- Patient responsibility
 - Smoking
 - Wound care
 - Compliance
 - B&Q

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Other cases

- Steroid injections
 - 8 vials!
- Buying horse fell off, "no idea horses were dangerous"
 - Pro jockey
- Bunion "stress fracture"
 - Hip saw

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Diabetes

- Pandemic
- 7%
- Bad blood supply
- Cant feel leg/foot
- Sugar rich; every bacterias dream
- = ulcers, infection, Charcot

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Ulcers

- 15% diabetics get ulcer. Ulcers pre-exist in 70-90% amputations
- 10% ulcers lose limb. 2/3 die in 5 years
- 30% forefoot amputees end up BKA
- 30% amputees lose other leg
- So get ulcers healed
- Prevention
 - NICE guidelines
- Cure
 - Nice guidelines
- Offloading, casting, in-hospital assessment

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Diabetes and Infection

- Red hot swollen foot
 - Infection
 - Charcot
 - DVT
 - Cellulitis
- NICE guidelines
 - Emergency admission
 - Not practical
- Rapid review and refer
- Hospital
 - NICE guidelines
 - Assess, image, treat

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Charcot

- Poorly understood
- Bones dissolve, lose architecture of foot
- Foot prominent bones and ulcerates-infection-bka
- Difficult for GPs
 - Red hot swollen foot
- How tell infection from Charcot
 - Hot
 - Red
 - Swollen
 - Blood tests
 - Xr changes
 - MRI changes
 - ????????????
- Offload
 - Early surgical fixation or POP months

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Charcot



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Summary

- Not much evidence
- All low grade evidence
- Cant do a double blind trial in surgery
- Evidence based medicine- prejudice based orthopaedics
- Standard of care
- Surgery is difficult
- Retrospectoscope fantastic instrument
- TBFTGOGGI

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Thank you



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