

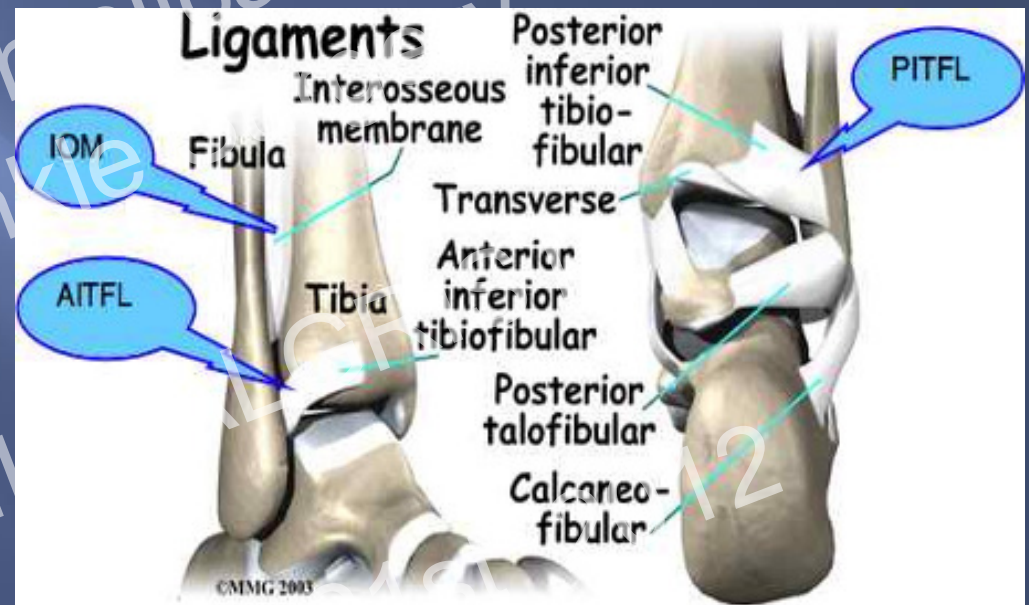
CHRONIC SYNDESMOTIC INSTABILITY

Andy Molloy
University Hospital Aintree
BMI Sefton Hospital

September 20th/21st 2012

Syndesmosis Injuries

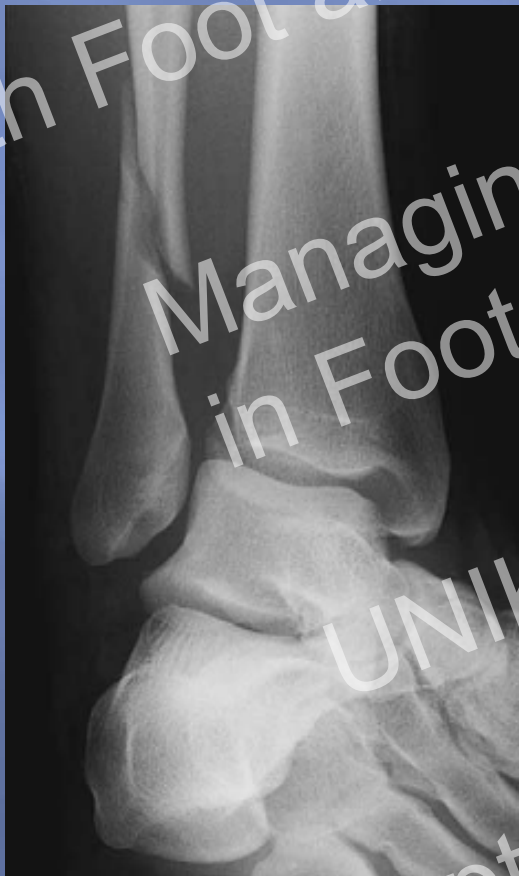
- Consists of 3 separate structures
- If section = diastasis
 - 2mm AITFL
 - 2mm IOM
 - 3mm PITFL
 - 10° Excessive external rotation



Mode of injury

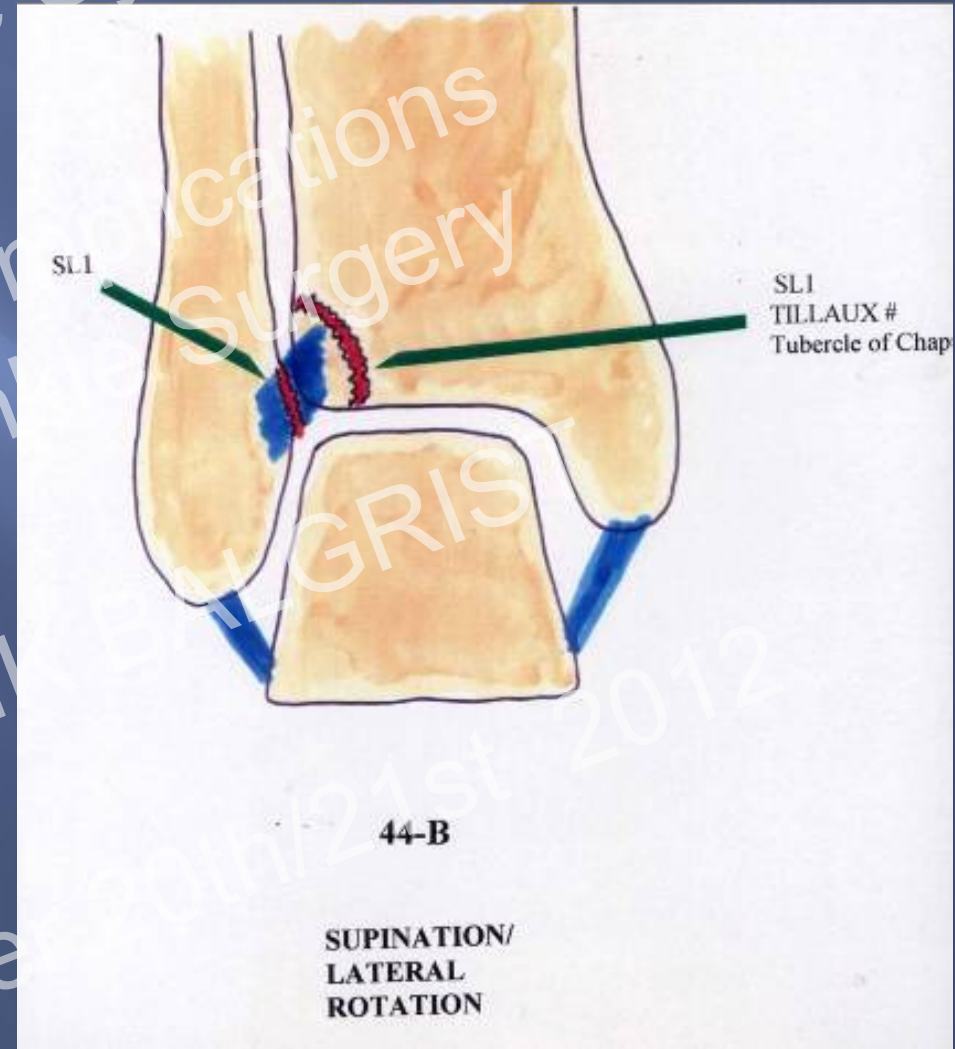
FRACTURE

ISOLATED / AVULSION



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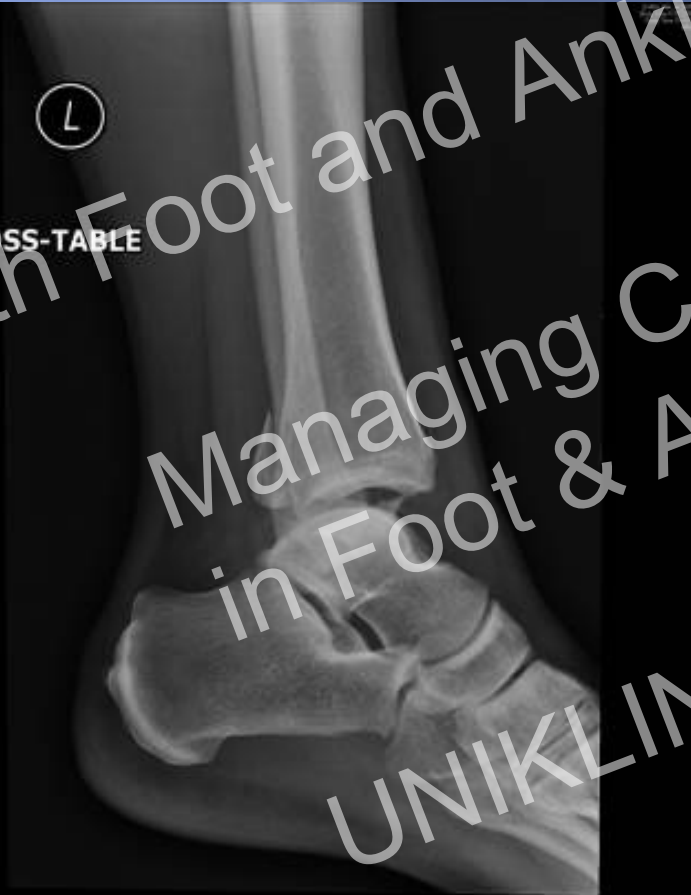
Mode of injury



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Fracture

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CROSS-TABLE



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Fracture

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Isolated

- ▣ Often misdiagnosed
- ▣ Recalcitrant pain / swelling
- ▣ +ve syndesmosis stress test
- ▣ WB XR = tibiofibular clear space >6mm, overlap of tibia and fibula at fibula incisura of <6mm
- ▣ MRI = residual high signal on T2 images

Radiographic evaluation of the normal distal tibiofibular syndesmosis

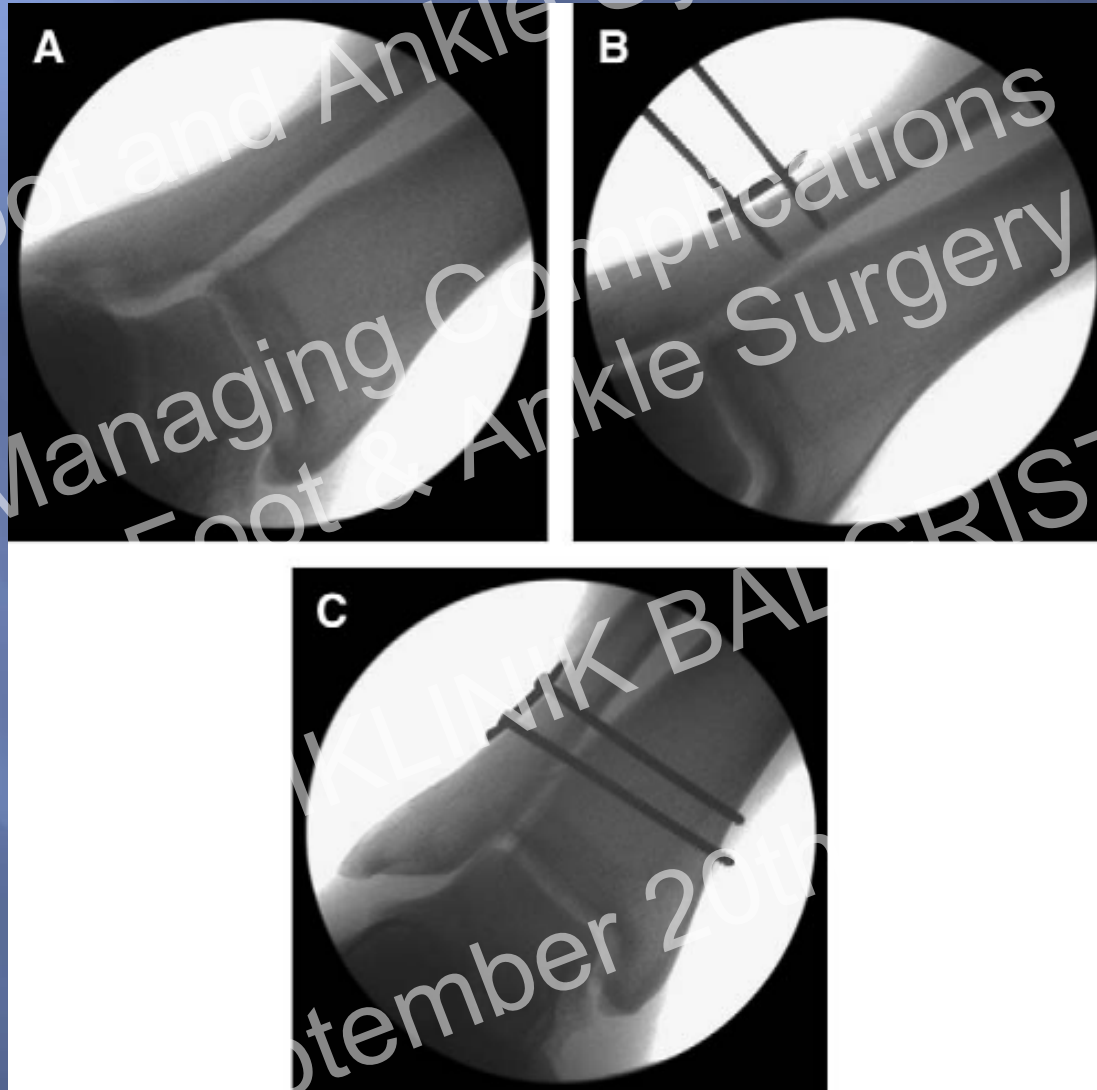
Shah, Kadakia et al FAJ 2012

- ▣ AP TF overlap 1.8-15.1mm
- ▣ Mortise TF overlap -1.9 – 15.1mm
- ▣ AP TF clear space 0-8mm
- ▣ Mortise TF clear space 1.4-7.6mm
- ▣ XRAY BOTH ANKLES WEIGHTBEARING

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Isolated Acute



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Beware malreduction



Chronic

MALREDUCED
FRACTURE

MISSED INJURY



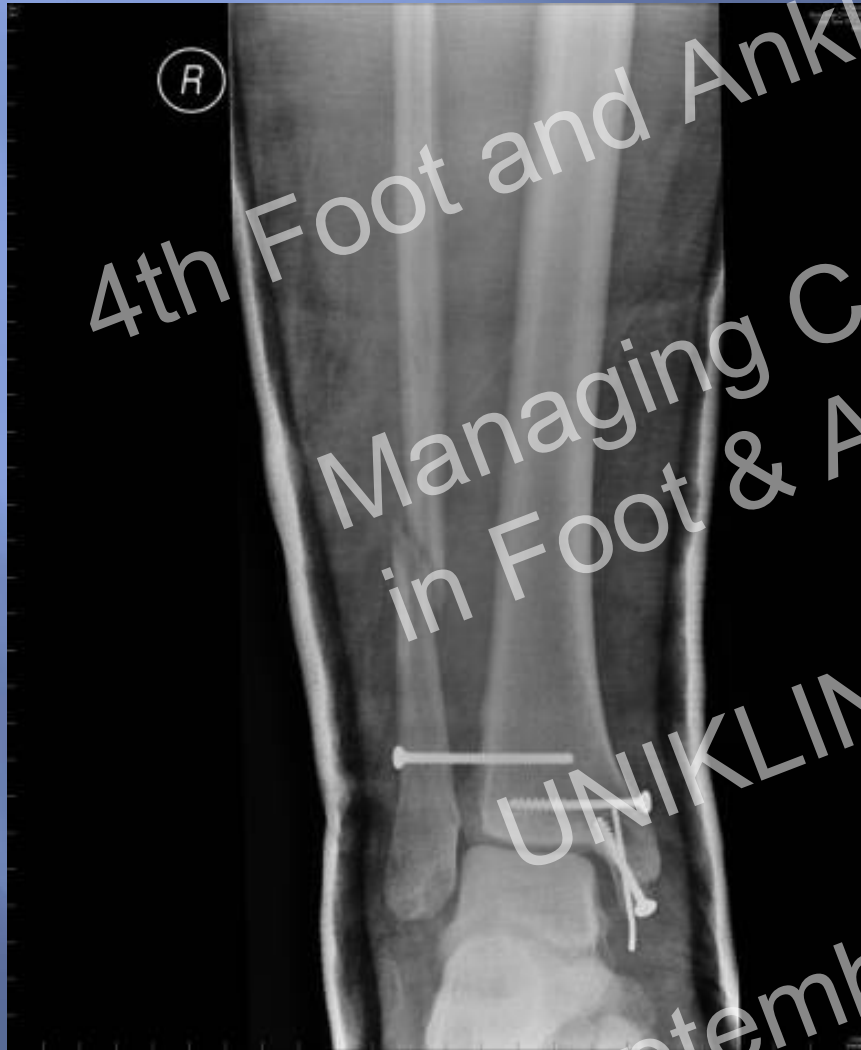
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What to do when in trouble



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Malreduced fracture



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72 yr male

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Missed Chronic

- ▣ Debride gutters and take down syndesmosis
- ▣ Fix with 2 screws and plate
- ▣ Wolf et al 70% good or excellent at 2yrs
- ▣ Recurrence rate of @ 10%
- ▣ Syndesmosis fusion or tendon graft
- ▣ If arthritic consider arthrodesis

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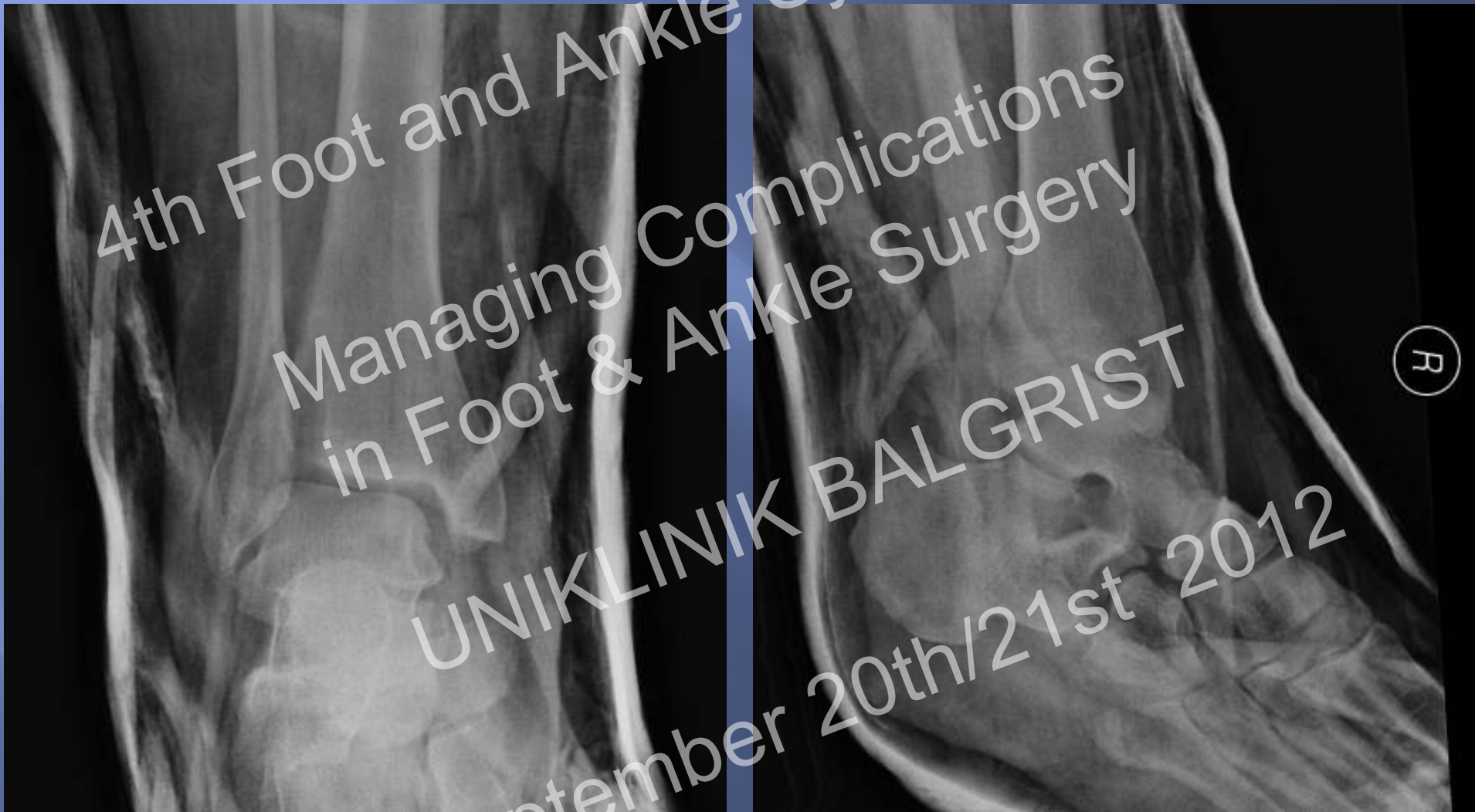
110 kg 5'4"

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VT BEARING





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Conclusion

- ▣ Acute unstable syndesmotic injuries require fixation
- ▣ Don't remove screws too early
- ▣ Have low index suspicion for syndesmotic injuries
- ▣ Address deltoid ligament
- ▣ Graft / fuse if recurrent

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THANK YOU



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