AOA
AUSTRALIAN ORTHOPAEDIC ASSOCIATION

The TFCC How I Do It!

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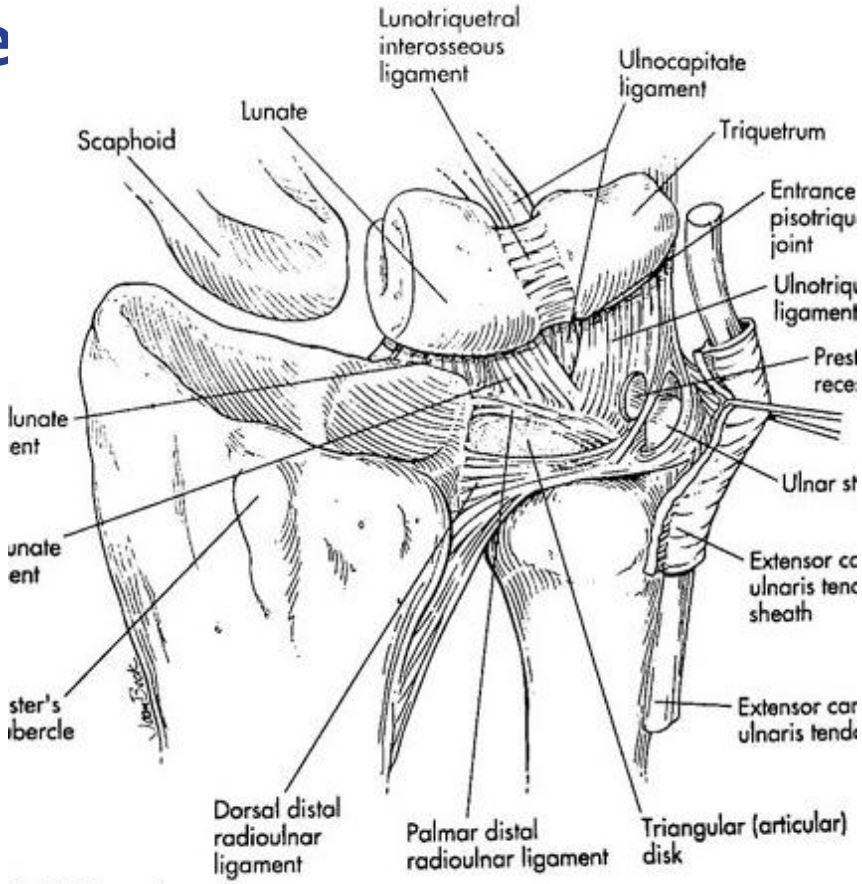
Hand, Wrist & elbow

Before Surgery

- History
- Examination
- X-ray
  - Ulna variance
- MRI
  - If not classic

TFCC Anatomy

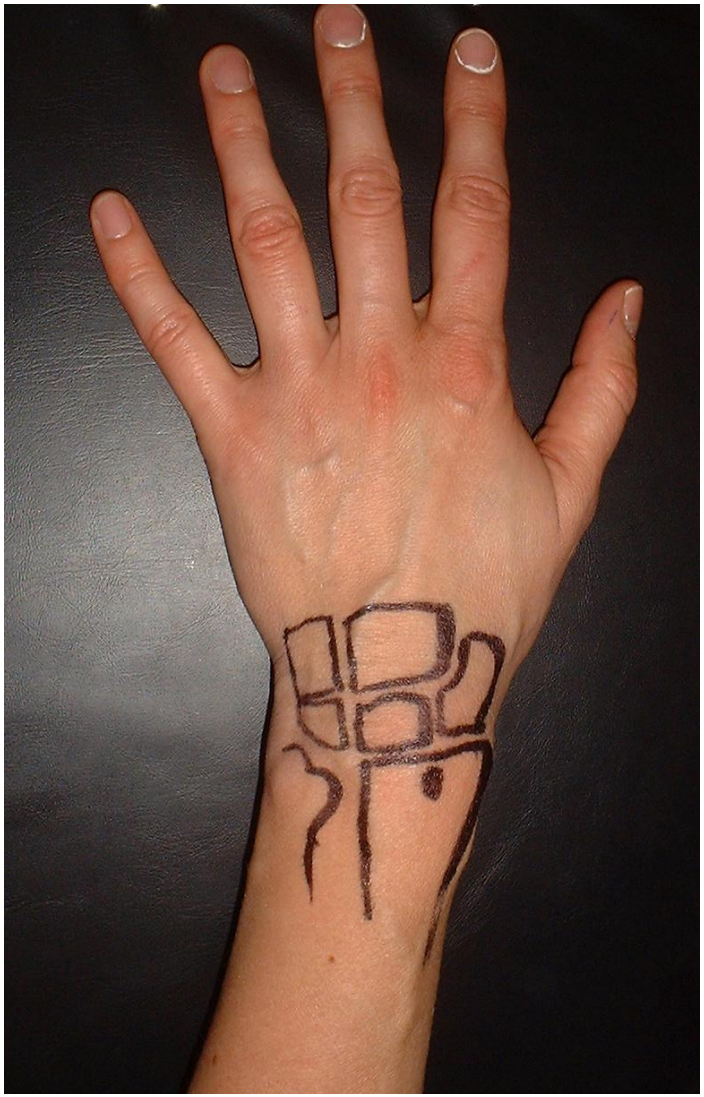
- Specific anatomic site helps determine diagnosis
- Careful palpation



1. TFCC anatomy.

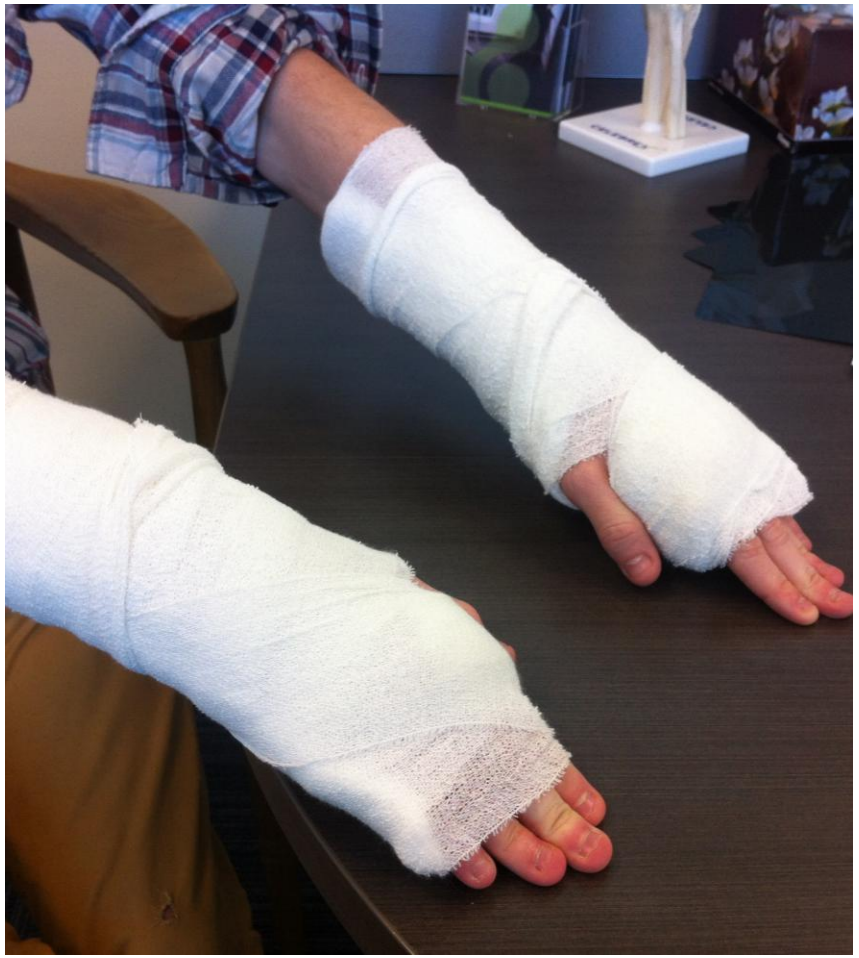
Examination

- Individually stress joints
- Duplicate motion/position that causes pain
- Examine wrist in pronation and supination



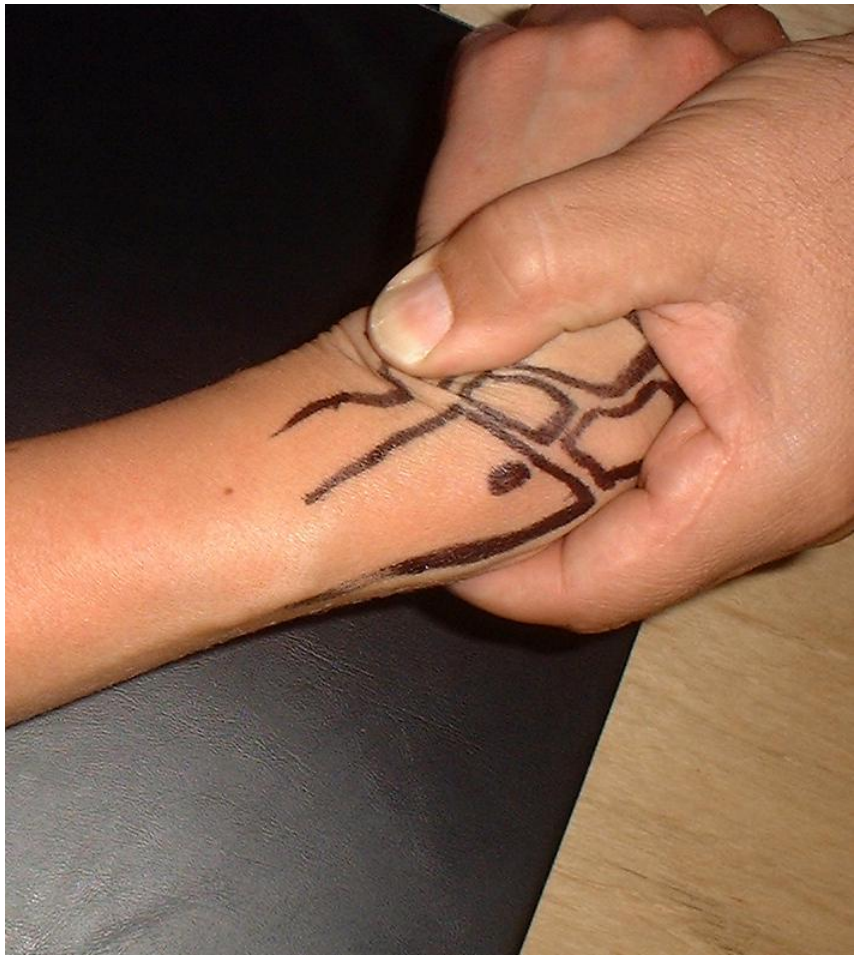
Non Operative Treatment

- Thermoplastic Wrist Splint x 6/52, usually custom moulded
- Steroid Injection, (+/- Guided) + splint x 6/52



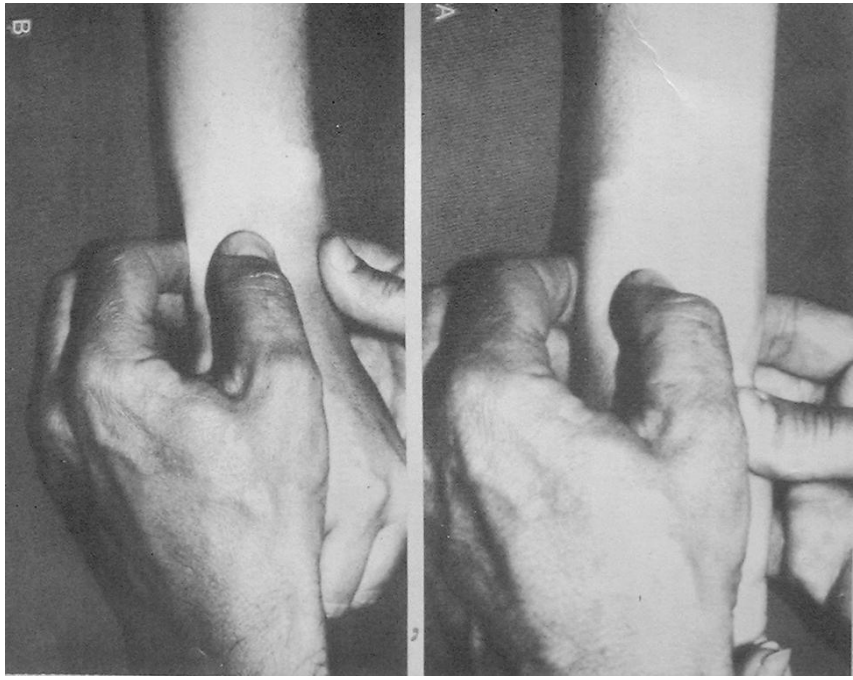
Factors to consider

- Previous Treatment
- Time since injury
- Age
- DRUJ Stability
- Associated Injuries



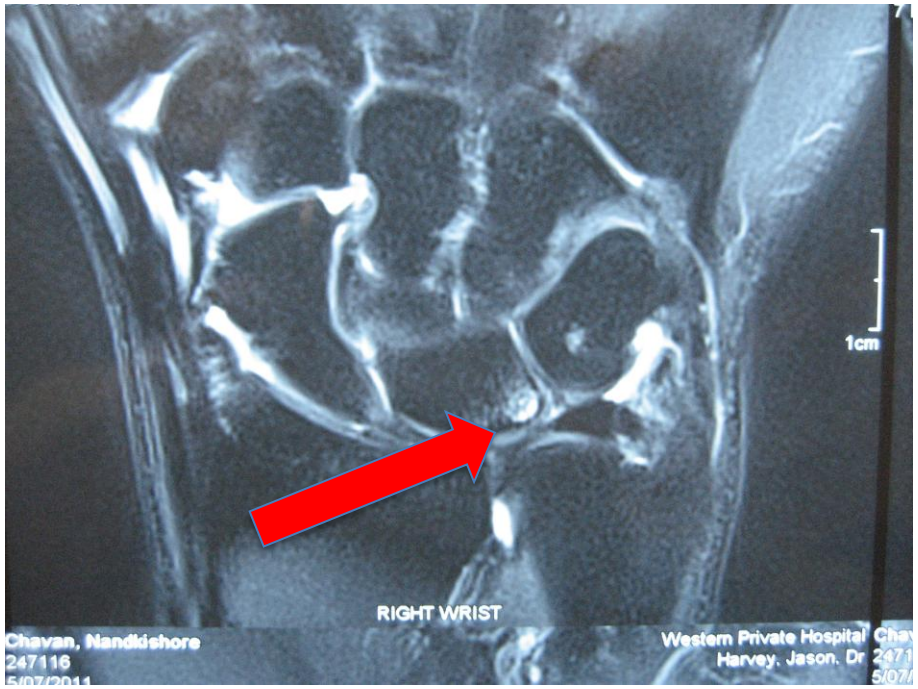
Differential Diagnosis

- Isolated DRUJ pathology, eg OA
- Ulnocarpal abutment
- Lunotriquetral Instability
- ECU pathology



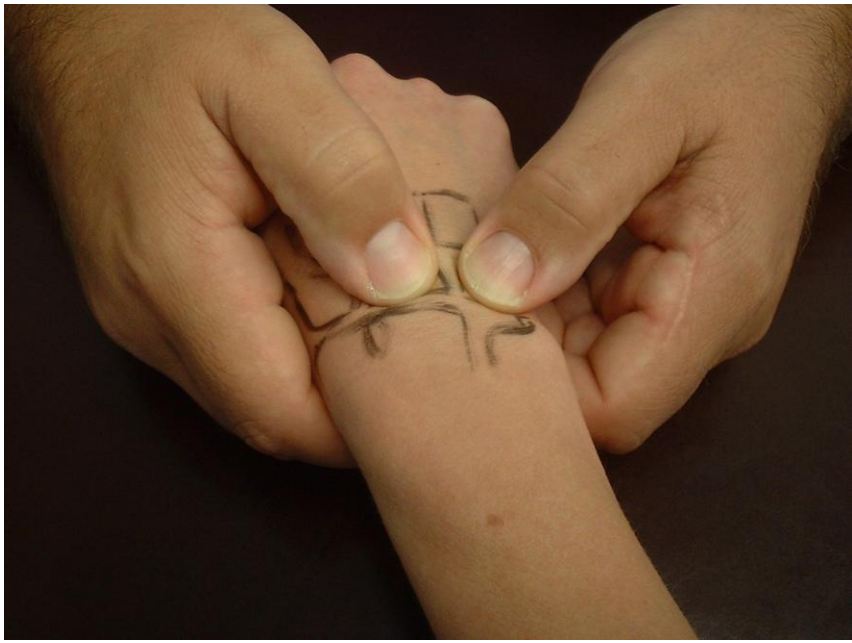
Ulnocarpal abutment

- Associated with TFCC tears
- Tenderness more dorsally ulnolunate
- Prominent ulnar head
- Pain on stressing ulno-carpal joint, RD & UD
- Ulna +ve variance



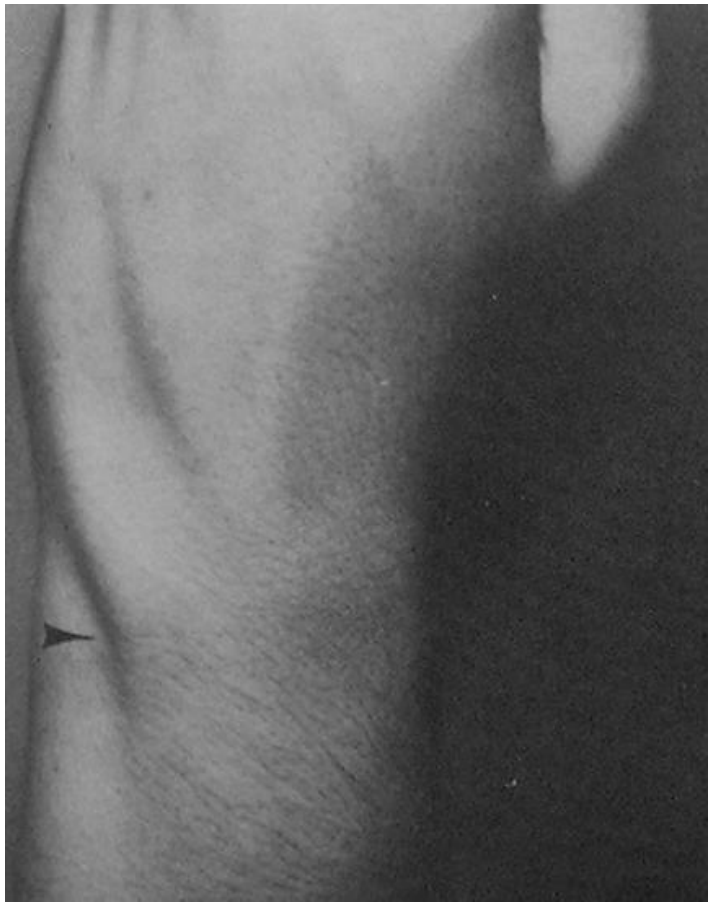
Luno-triquetral instability

- Sensation of instability or giving way in the wrist
- Painful click on ulnar deviation
- Tenderness over L-T joint
- Ballotment test
- Schuck or shear test



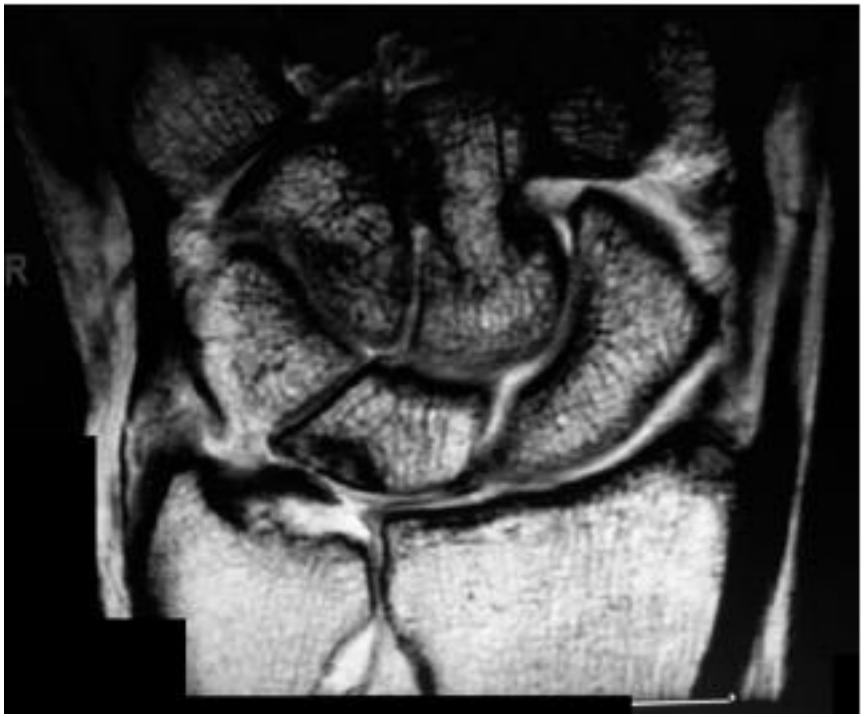
ECU tendon subluxation

- Injury eg tennis
- Painful soft snap in wrist
- Subluxation ECU: resisted ulnar deviation in supination



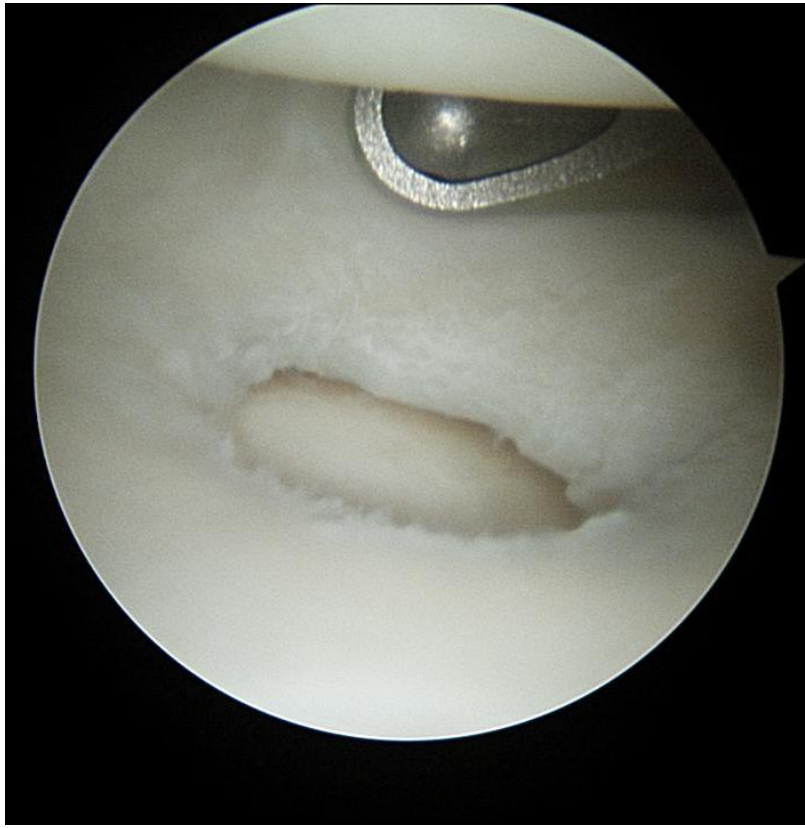
MRI

- If clinical exam not typical
- Dedicated wrist coil
- Not insignificant false negative rate
- Lesions beyond articular disc difficult to identify
- Arthroscopy remains gold standard



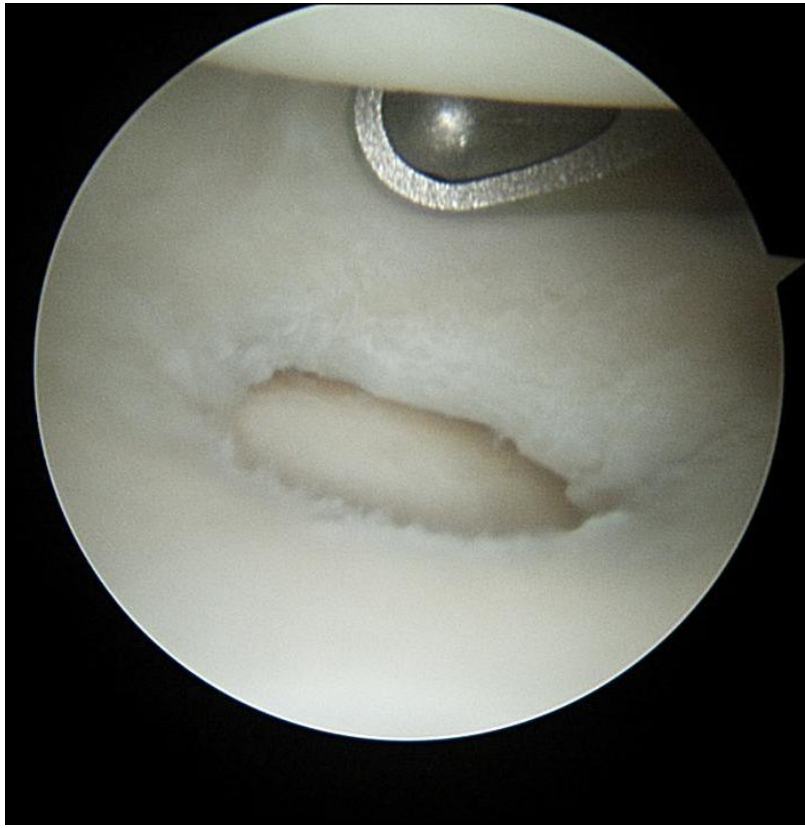
TFCC tears

- approx. 50% population > 50 years have attritional lesions of the TFCC
- Consider addressing ulna
- rare < 20 years



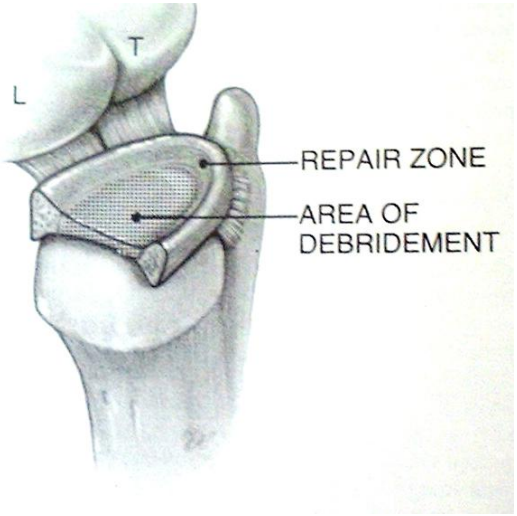
TFCC tears

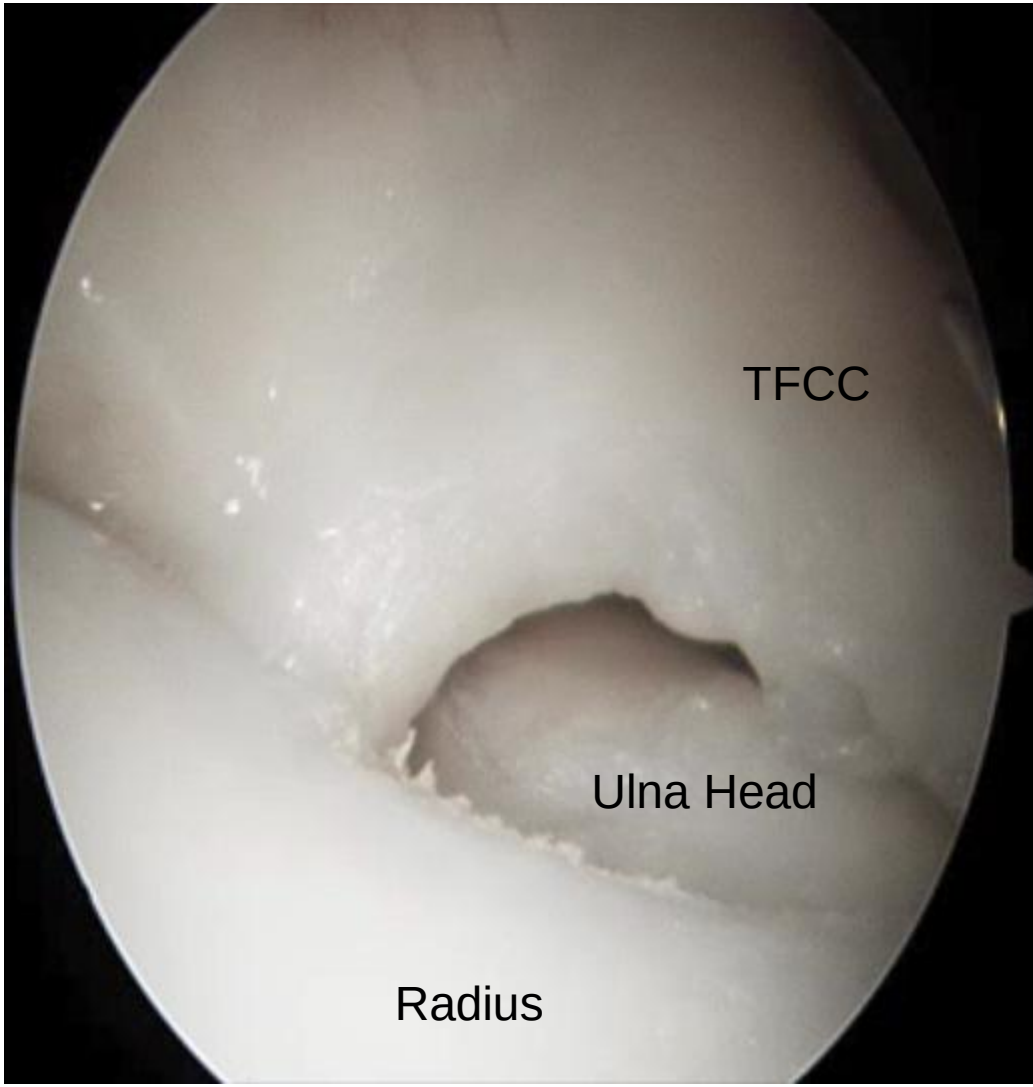
- Repair if peripheral
- If no DRUJ instability soft tissue through floor of ECU
- If instability through bone



Central TFCC tear

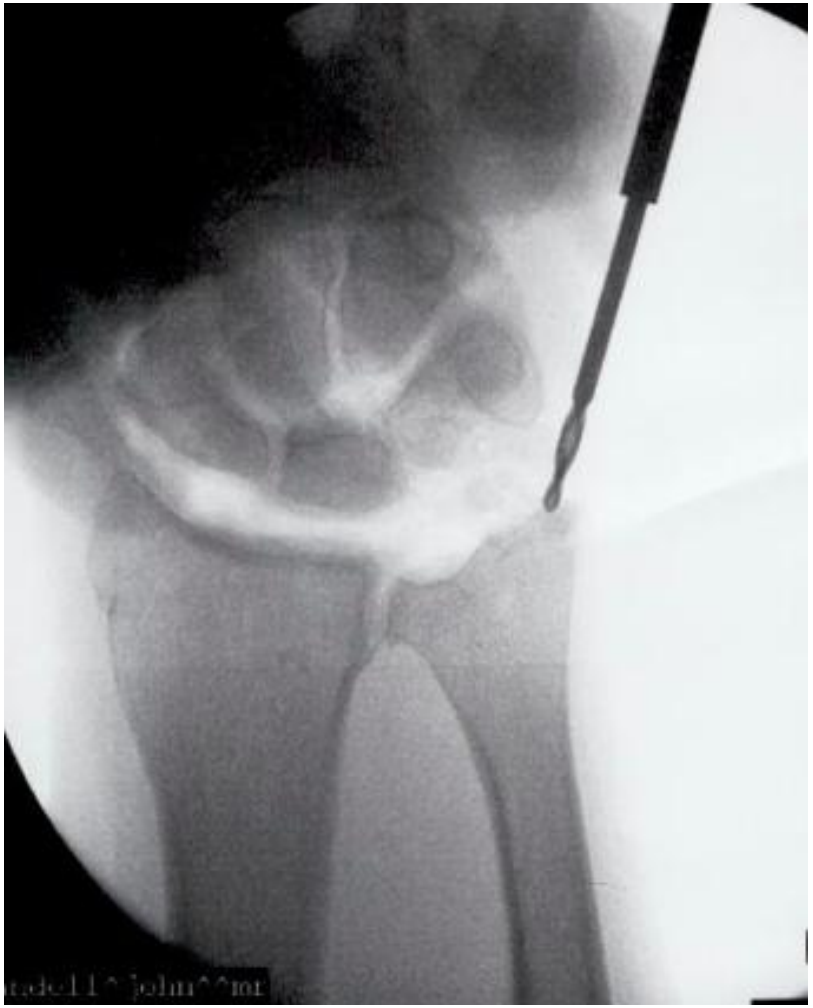
- Debride to stable rim
- Use Biter and shaver



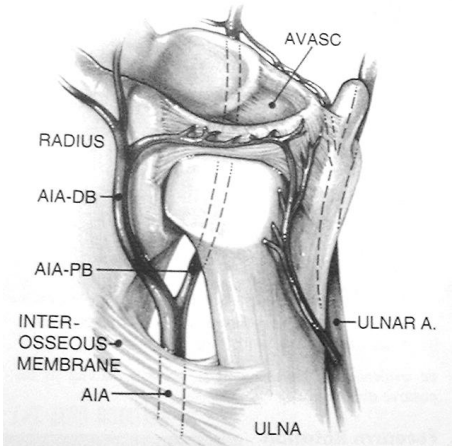


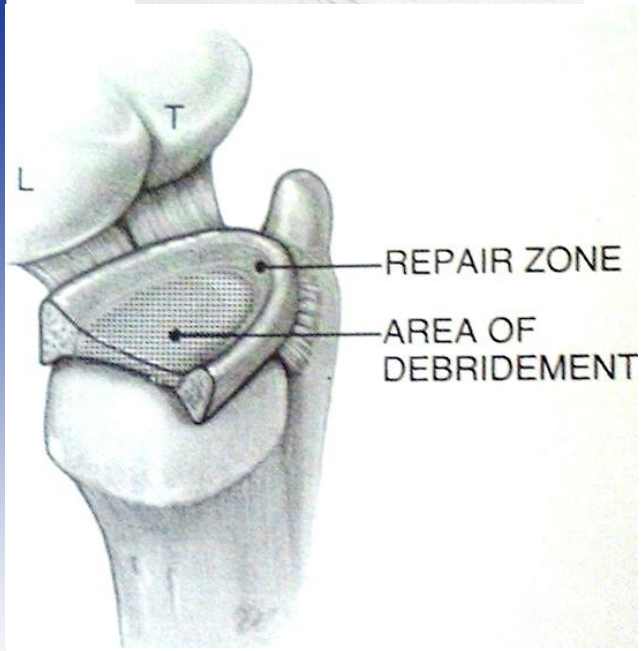
Degenerative Tear with Abutment

- Debride TFCC tear
- If mild ulna +ve variance can do an arthroscopic wafer
- If > 2mm or so then ulna shortening
- If evidence of abutment, no tear and +ve can do under TFCC from DRUJ



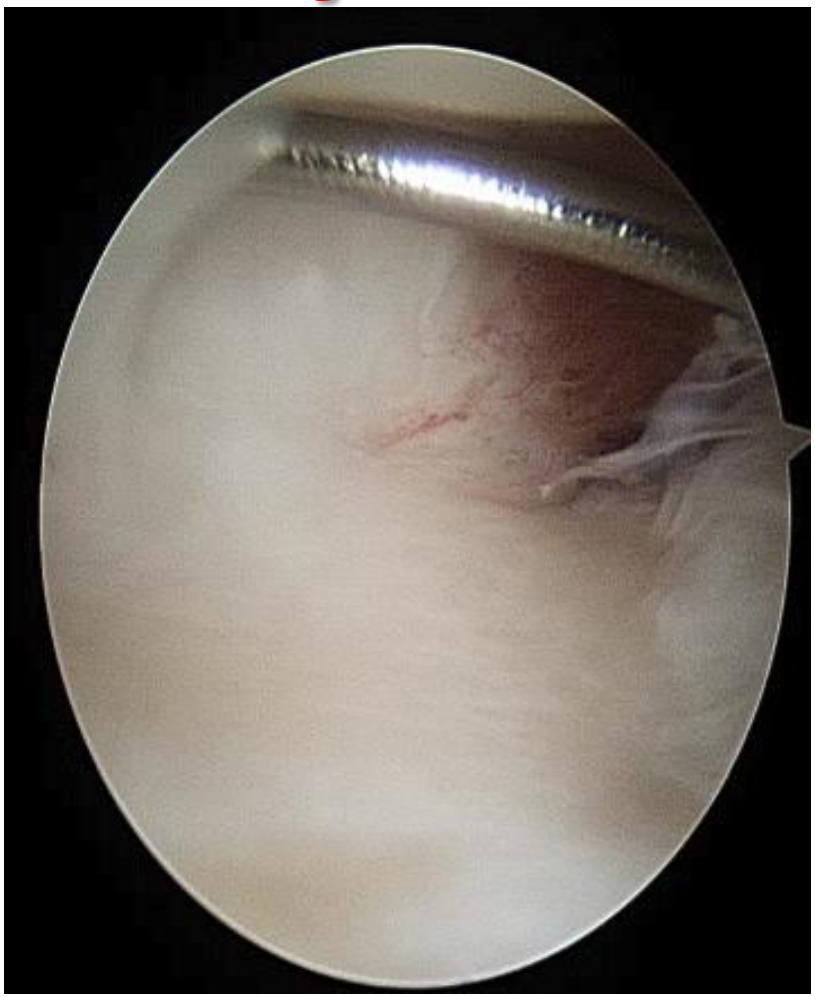
Combined Tear





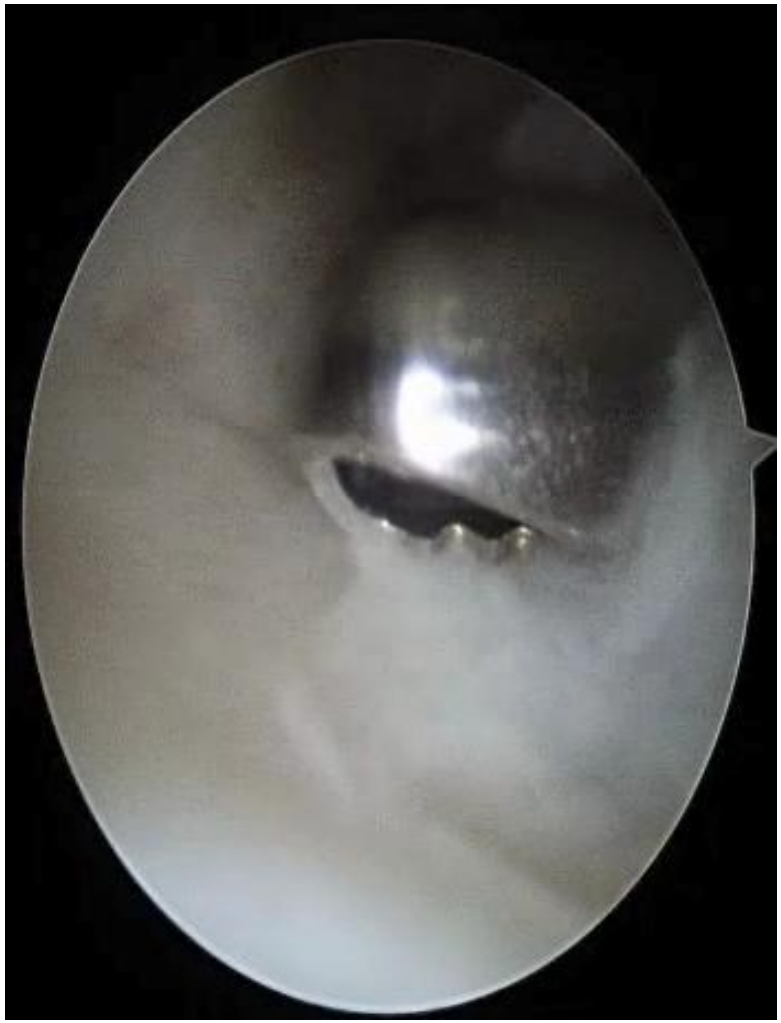
Peripheral Tear, No DRUJ instability

- Identify tear
- Determine if it is repairable



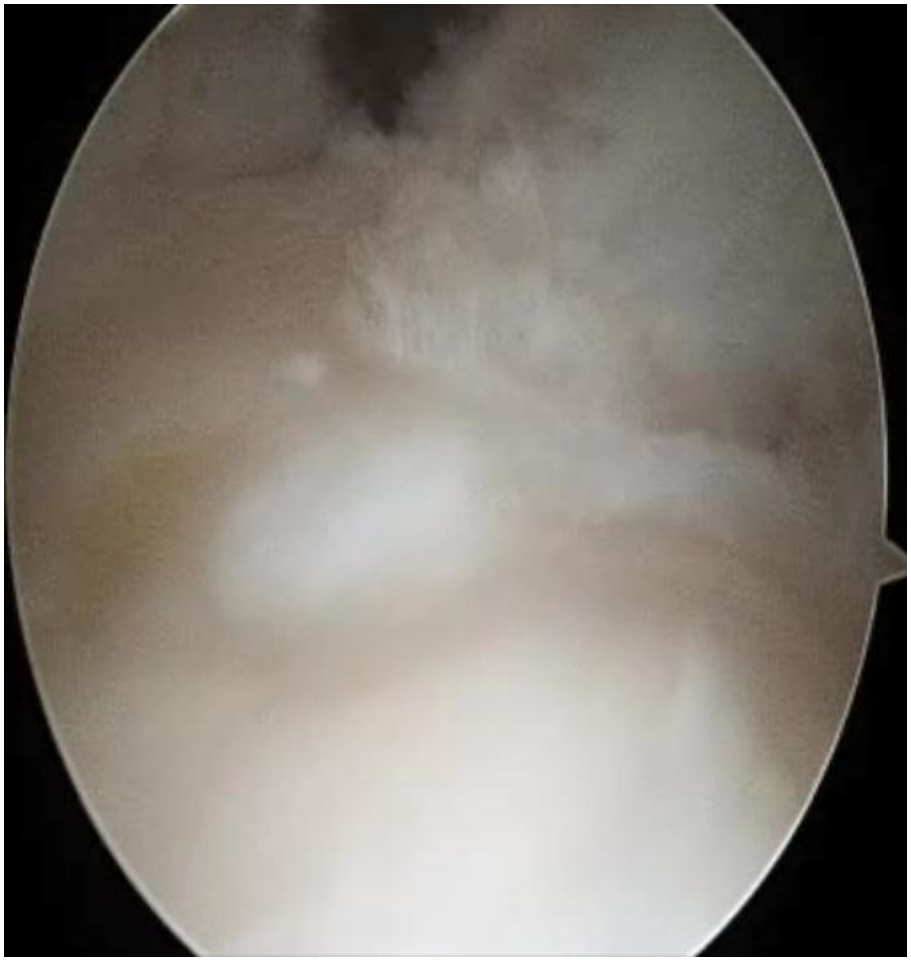
Peripheral Tear cont

- Debride edges of tear
- Debride synovitis in ulna aspect of wrist



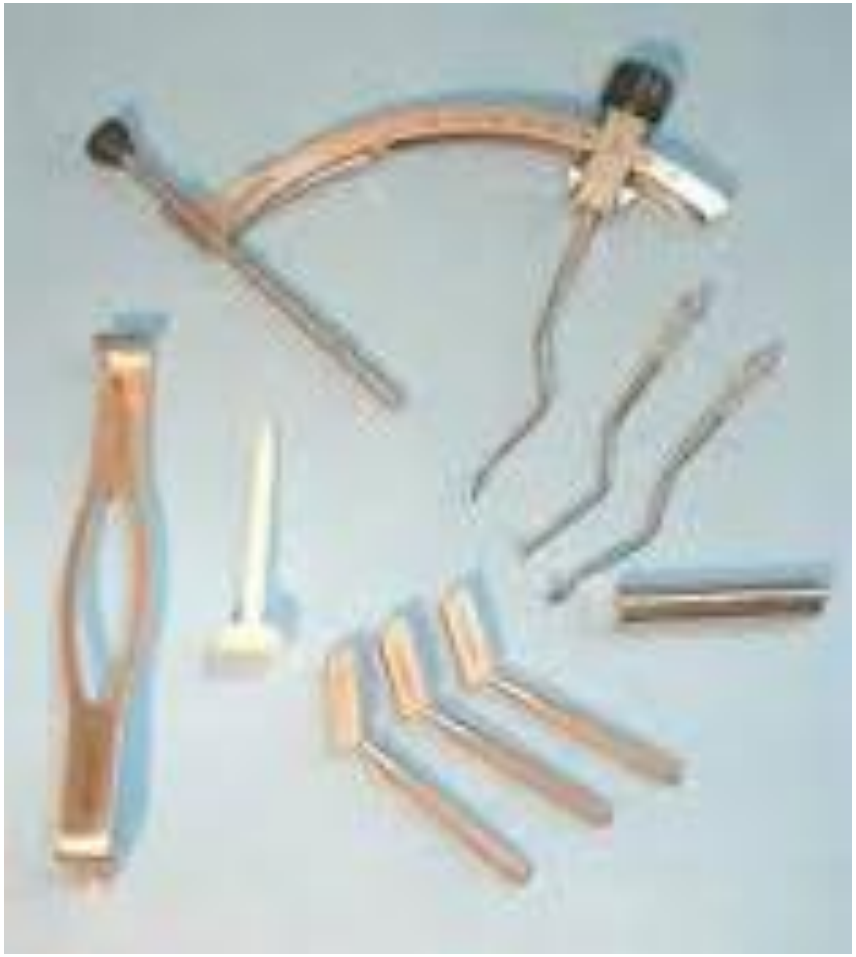
Peripheral Tear, suture

- Avulsion from dorsal capsule
- Repair through the ECU subsheath
- Use 2-0 PDS, tie in subsheath



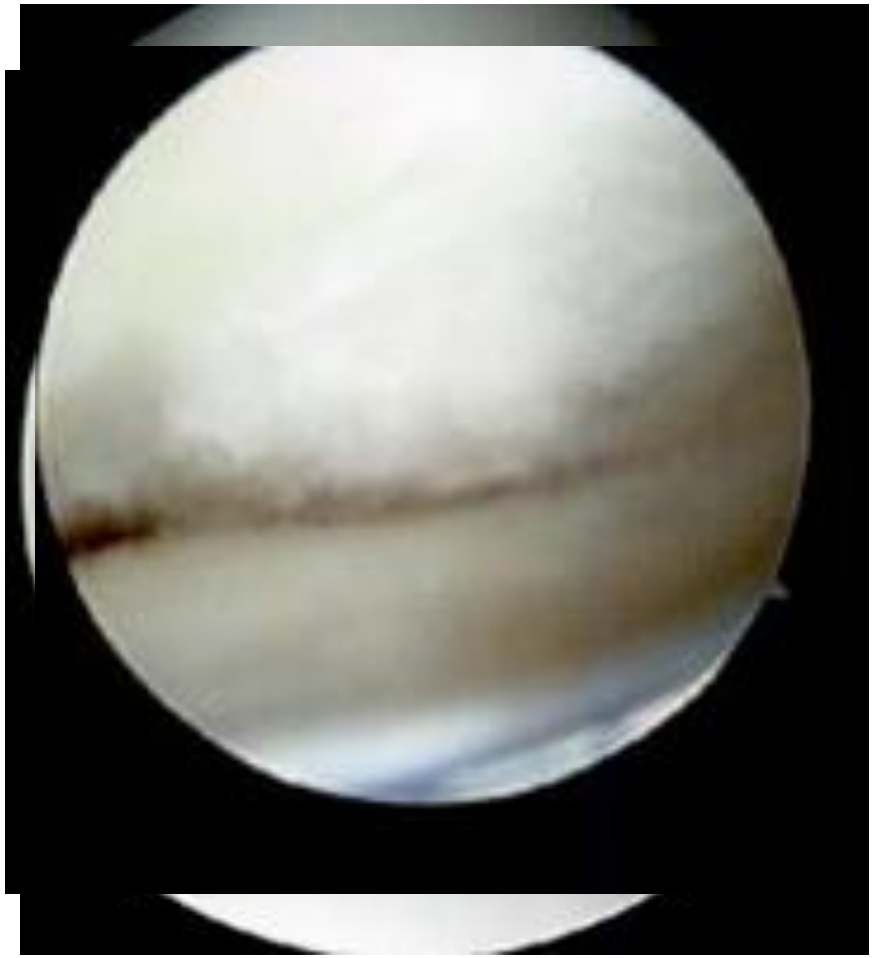
Peripheral Tear, DRUJ instability

- Foveal disruption
- Repair through drill holes in the ulna
- I use a targeting jig to make tunnels
- Just like an ACL guide but smaller



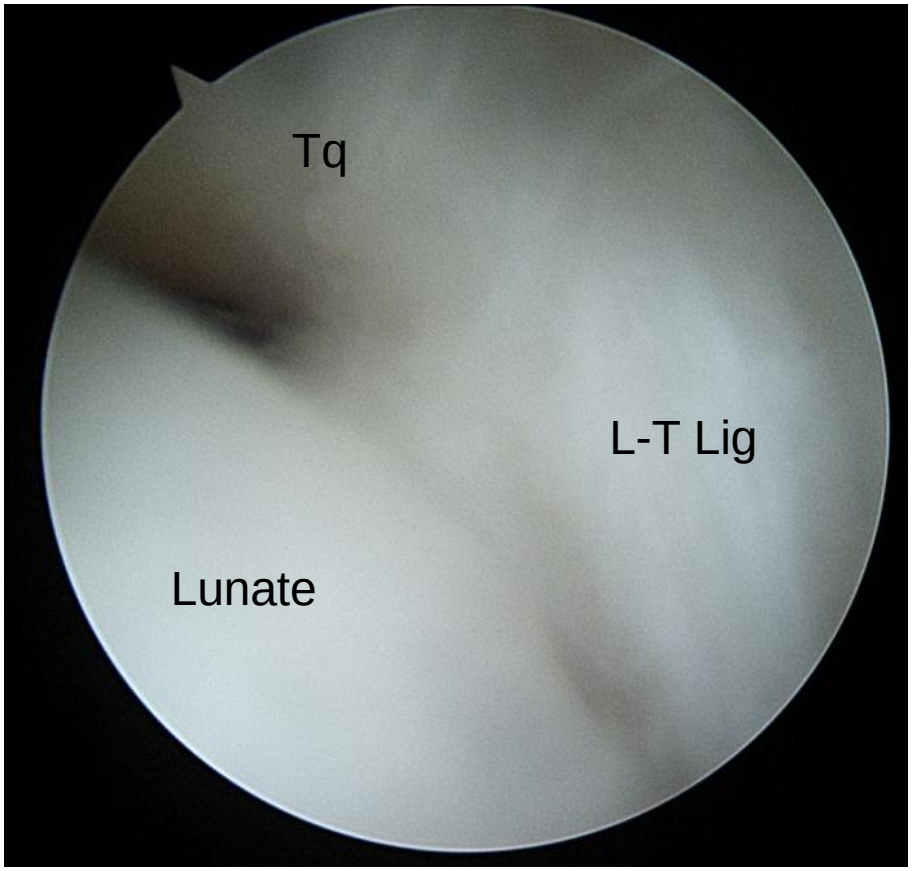
If Normal TFCC

- Arthroscopy of DRUJ to evaluate the underside of the TFCC
- Can see foveal fibres
- May see undersurface tear

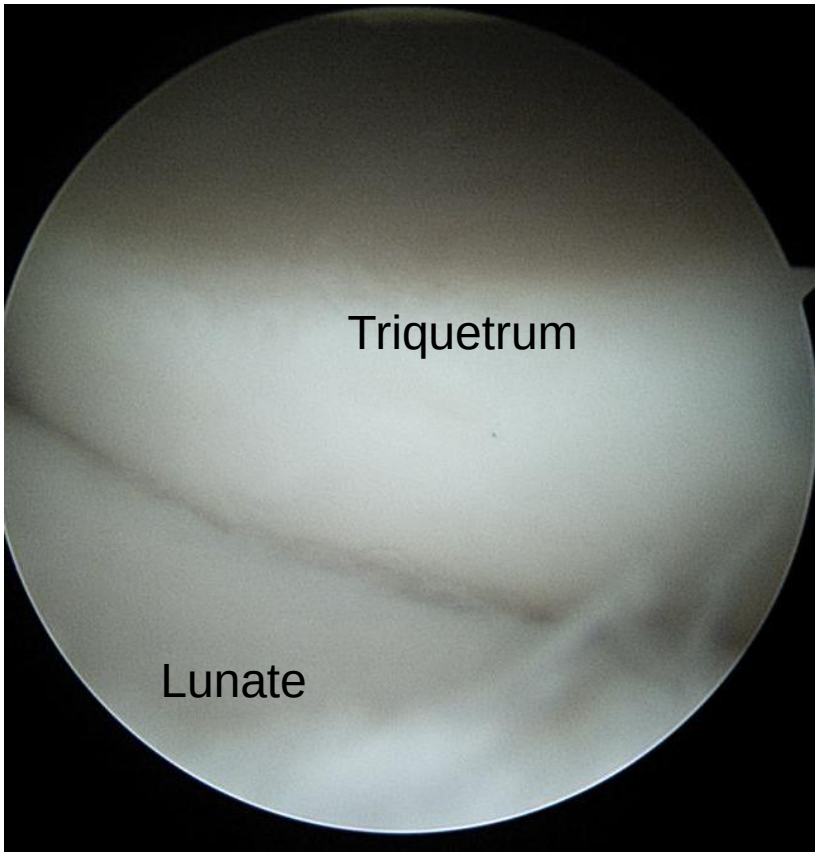


Lunotriquetral Instability

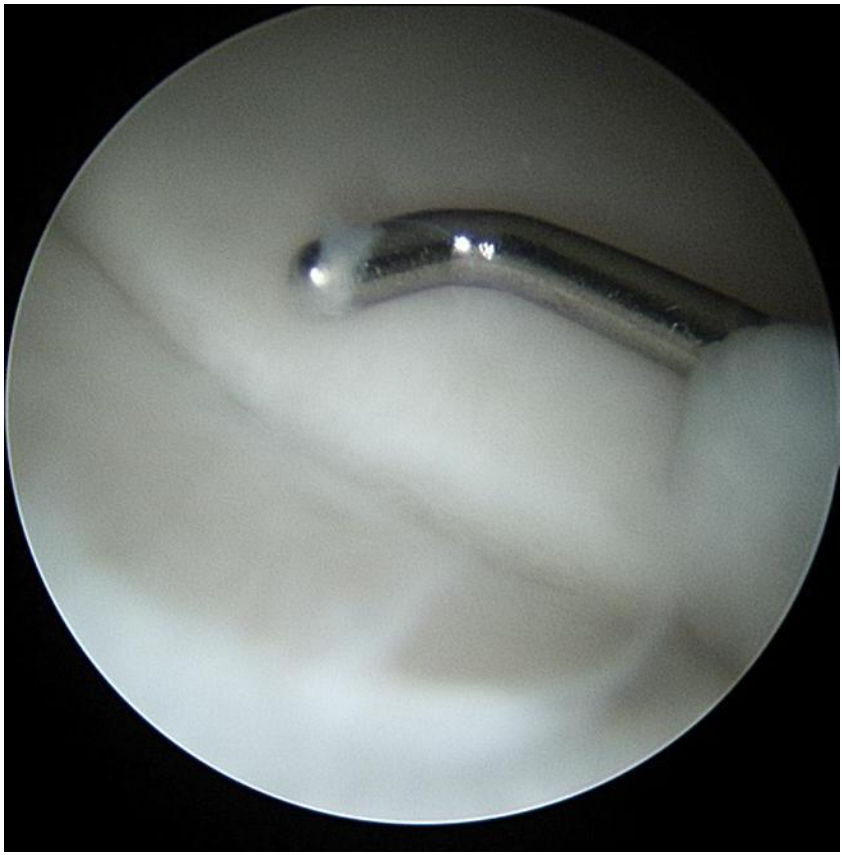
- L-T ligament poorly seen on MRI
- See step in midcarpal joint
- L-T ligament torn, see from radiocarpal joint, especially membranous portion
- Volar portion more difficult to see, may need volar portal



Lunotriquetral Instability



Lunotriquetral Step



Reduced

Conclusion

- History
- Examination
- Plain x-rays
- Result in accurate diagnosis in most cases
- Arthroscopy good addition to armamentarium and therapeutic

Thank You