

Office Orthopedics

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No conflict of interest
No financial disclosures



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Objectives

ACL rupture
Shoulder - rotator cuff tear
Elbow - distal biceps rupture
Thumb - ulnar collateral ligament
Identify time sensitive orthopedic problems



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What constitutes an urgent Orthopedic Problem?

Tendon is retracted and begins to scar in shortened position
Bone is healing with malalignment
Ligament is scarring down
Fracture pain is severe due to instability

(Emergencies: dislocated joint, septic joint, compartment syndrome, flexor tenosynovitis)



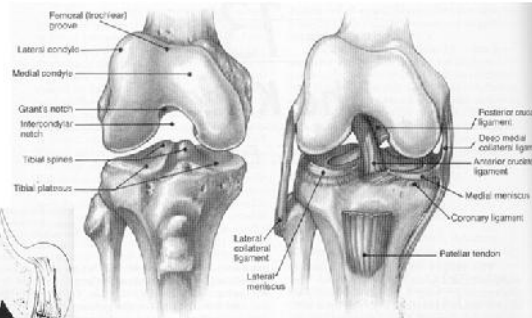
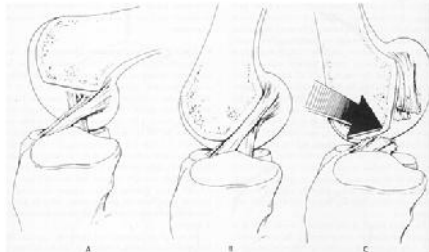
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Anterior Cruciate Ligament

History

- hyperextension injury
- feel/hear a pop
- knee effusion occurs within an hour



Anterior Cruciate Ligament

Exam

- + Lachman (>90% sensitivity)
- + Pivot shift
- + anterior drawer

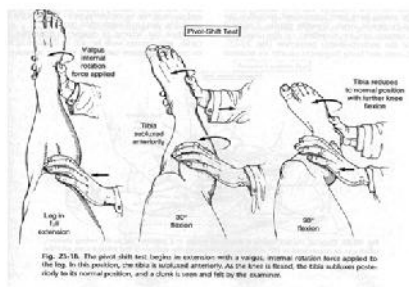


Fig. 23-15. The pivot shift test begins in extension with a valgus, internal rotation force applied to the leg. In the previous, the tibia is reduced anteriorly. As the knee is flexed, the tibia subluxes posteriorly to its normal position, and a click is seen and felt by the examiner.



Fig. 23-16. The Lachman test is performed at 30° of flexion with an anteriorly directed force applied to the proximal tibia while the opposite hand stabilizes the thigh.

Anterior Cruciate Ligament

No rush
Needs MRI
RICE
Work on ROM
Might need to allow MCL tear to heal

Its a reconstruction not a repair
Ligament stump will be removed not reattached.



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Rotator cuff tear



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Rotator Cuff

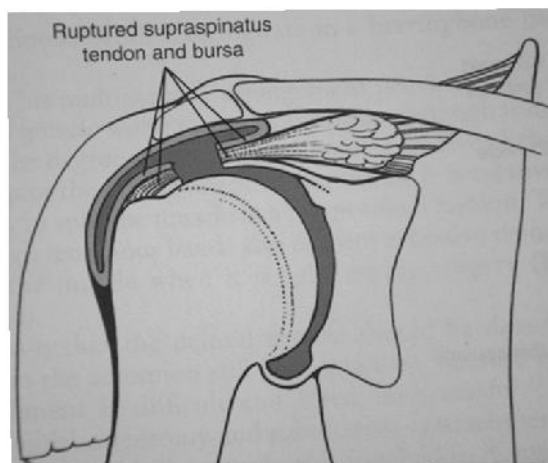
- Supraspinatus, infraspinatus, teres minor, subscapularis
- stabilizes head in glenoid
- abducts, externally and internally rotate



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Rotator cuff tear

- Pain with elevation
- usually chronic
- repetitive overhead activity
- 40% of people >60yo
- night pain common



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Physical examination

- Special Tests:
 - Subscapularis—"Lift Off" Test, "Belly press"
 - Supraspinatus—"Jobe" (empty can),
 - Infraspinatus—"Drop Sign"
- MRI if failed conservative treatment

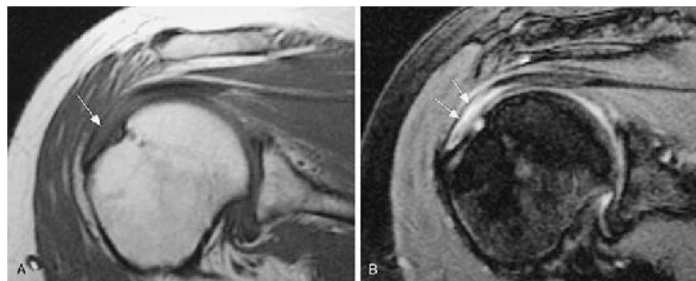


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Partial thickness tear

- footprint is 15 mm thick
- 32-37% of people >40



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Full thickness tear

- 40% of people > 60 yo
- most commonly supraspinatus
- Meta-analysis of 1500 shoulders
 - MRI 91% accurate for full thickness tears



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Rotator cuff tear

- Most common site
 - supraspinatus insertion on humerus
 - watershed area of blood flow



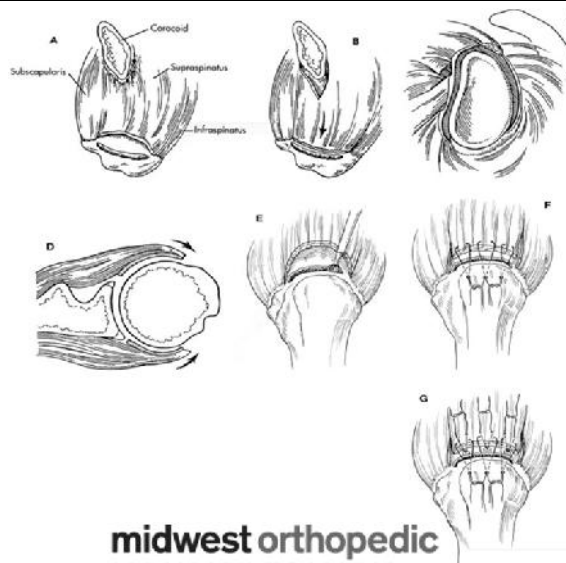
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Treatment

- < 50% tear - non op first
 - debride and decompression
- > 50% tear
 - RTC repair

RTC repair

- different shapes
- double row
- single row



Post op

- No active abduction for 6 weeks
- PT : ROM
 - strengthening after 6 weeks
 - 3-4 months to full use



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Distal biceps rupture



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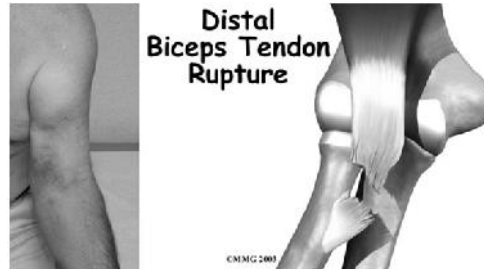
Distal biceps rupture

attaches to radial tuberosity
primary function: supinate

Injury: supinated, eccentric contraction

partial tears: chronic repetitive injury

watershed area



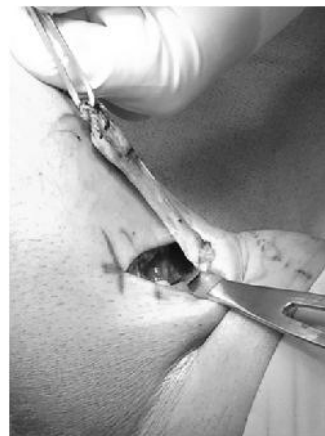
Distal biceps rupture

pain with resisted supination

popliteal muscle

ecchymosis

not very painful after rupture



Distal biceps rupture

3 week window to repair

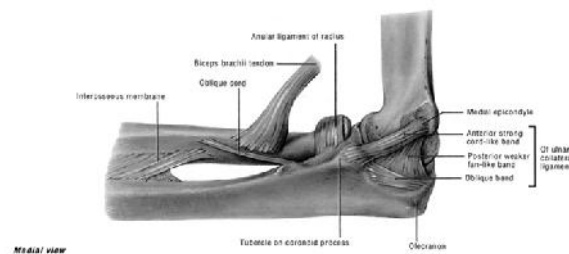
lacratus fibrosis may hold it out to length, if not it will retract up the arm.

young active patients require reattachment



Distal Biceps Repair

- reattach tendon to bone.
- 30% lateral antebrachial n paresthesia
- may lose 5-10 degrees of extension/pro/supination

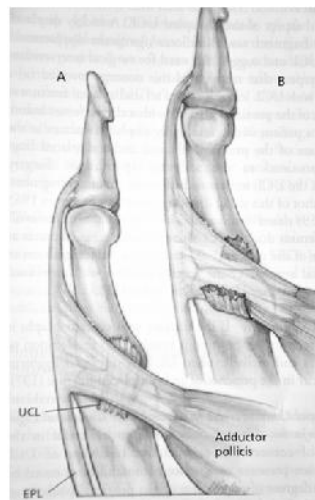


Thumb Ulnar Colateral Ligament

Thumb UCL

“gamekeepers thumb”
“skier’s thumb”

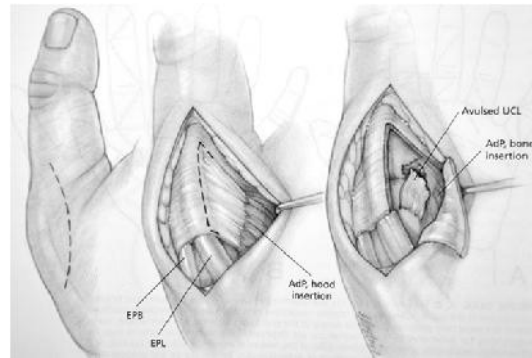
UCL ruptures and retracts behind
adductor aponeurosis.
= Stener lesion
without surgery joint will not be stable
- leads to premature OA



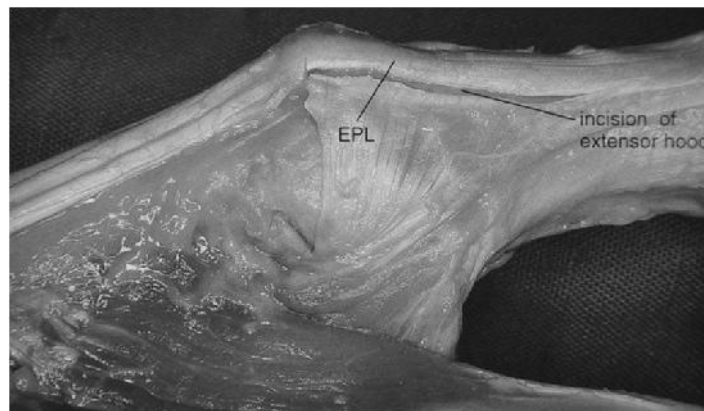
Thumb UCL

Exam: Flex MCP to 30deg and stress UCL. If >30 degrees instability it is ruptured.

Repair:
anchor UCL back to proximal phalanx



Thumb UCL

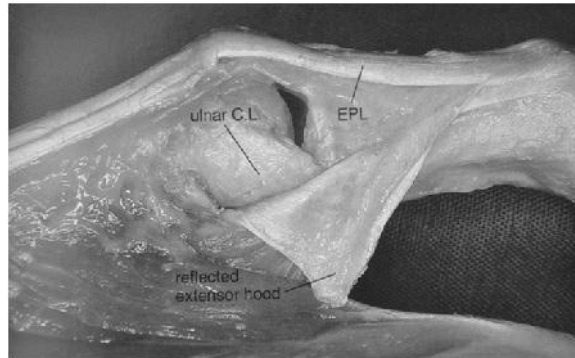


Thumb UCL

3 week window to reattach

if later - may need allograft reconstruction

if not repaired leads to joint instability and arthritis



distal radius fracture

Distal Radius

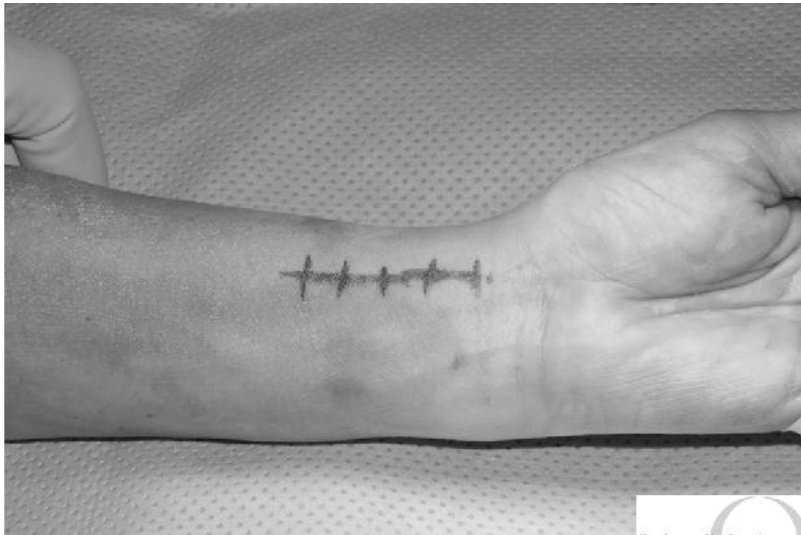
- FOOSH
- dorsal angulation
- shortening
- well padded wrist splint (mp's free)



Distal Radius

- casting
- surgical fixation
 - >2mm articular step off
 - dorsal angulation >10 deg (active person)
 - shortening >2mm





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Summary

Identify time sensitive orthopedic problems
ACL rupture identification and evaluation
Shoulder RTC tear
elbow - distal biceps rupture
Thumb - UCL rupture
Fractures

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Summary

Have your orthopedist on speed dial
Communicate regarding injuries
if unsure send patients quick, but do ease their fears



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Thank you

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