



11th

Advanced Course
on Knee Surgery

PCL - Clinical Case Discussion



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Disclosures



- No relevant disclosures

Case D.G.



- 41M severe knee dislocation 1wk ago while in golf cart rollover
- Medial sided pain
- Instability



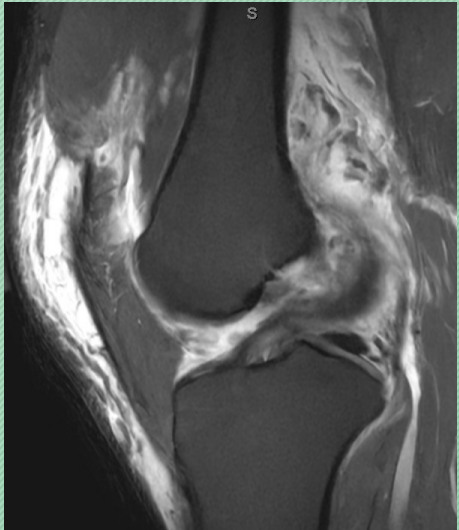
Case D.G.



- Exam:
 - Swelling from med thigh to ankle
 - Skin abrasions med knee
 - + effusion
 - ROM 10-45°
 - Good SLR in brace
 - 2+ valgus
 - ++ AD
 - ++ PD
 - NVI



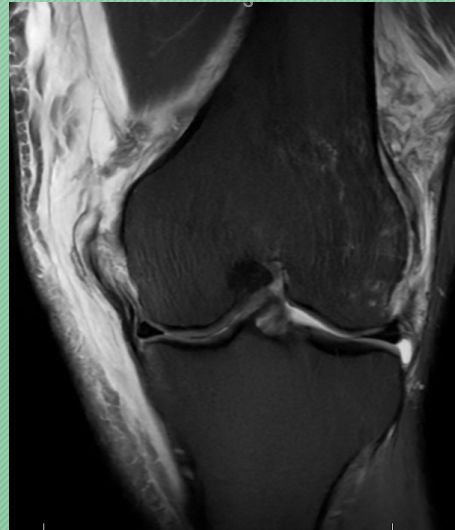
Case D.G.



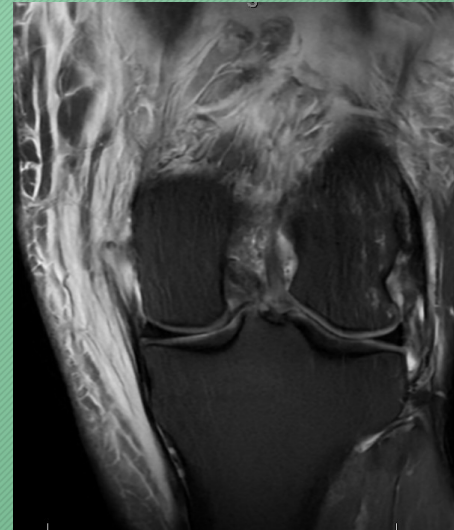
Gr3 ACL (mid)



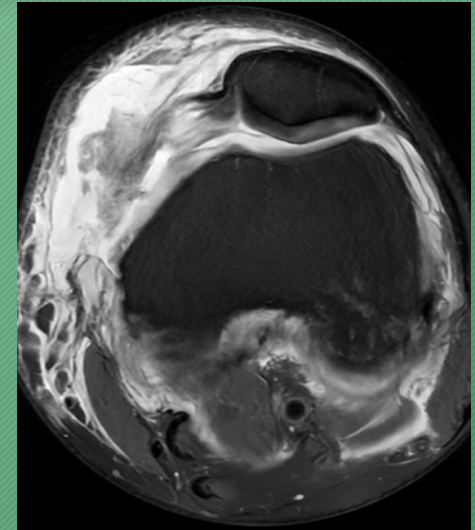
Gr3 PCL (mid)



Gr3 MCL (fem)



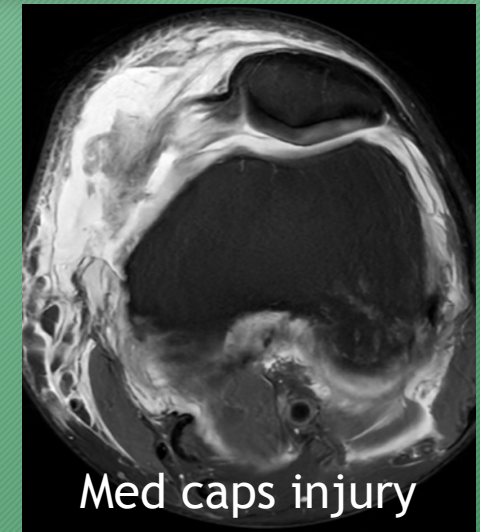
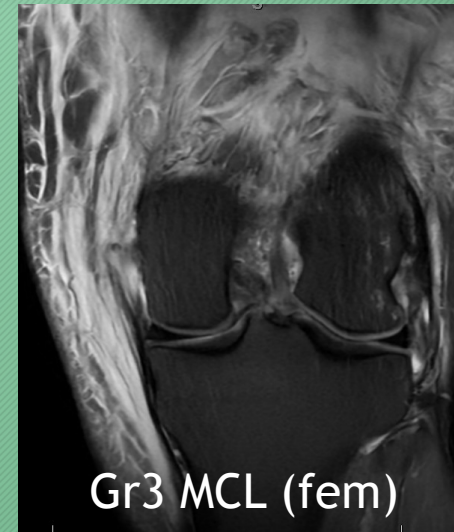
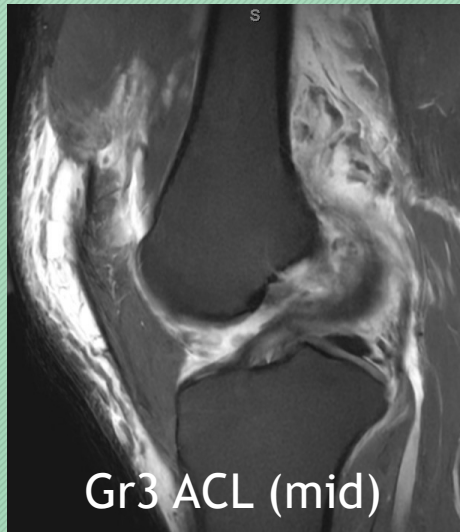
Gr3 MCL (fem)



Med caps injury

- CT angiogram: No acute vascular injury
- USG Venous Doppler: Negative for DVT

Case D.G. - what to do?



1. Wait until flexion contracture resolved?
2. One stage or two?
3. ACL/PCL what grafts?
4. MCL repair or repair and augment?

Case D.G. - allo ACL-R, allo PCL-R, MCL repair + synthetic MCL-R, POL repair



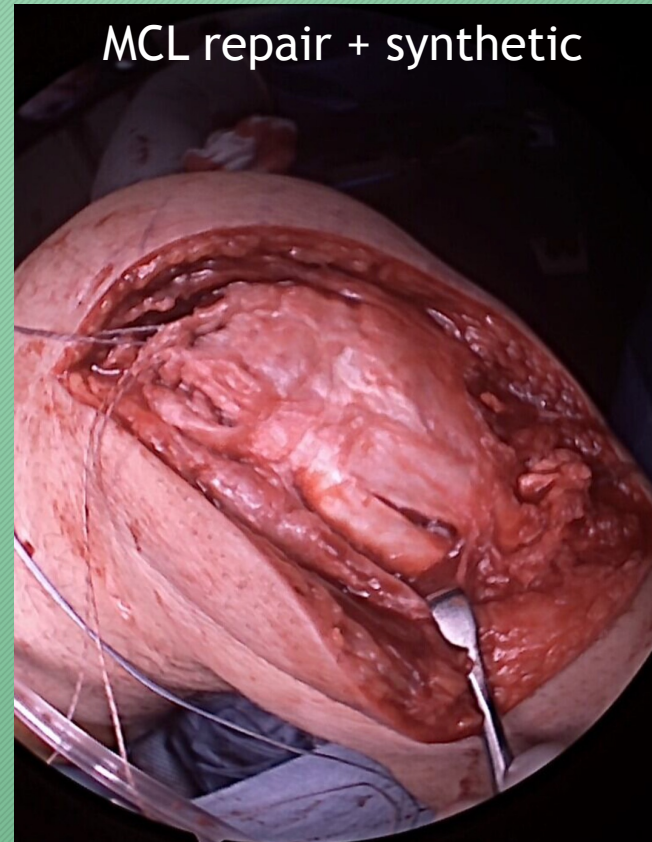
PCL fem tunnel



PM portal



ACL fem tunnel



MCL repair + synthetic



PCL tib tunnel



ACL tib tunnel



ACL



Patient B.L. - Multiligament



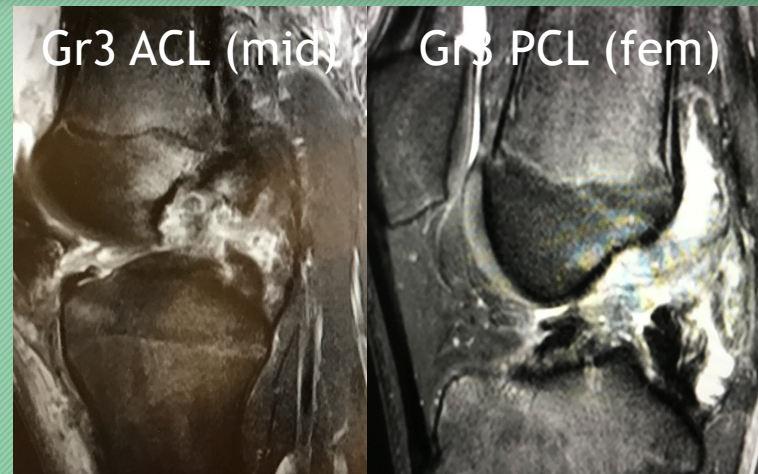
- 16M Left back
- Valgus - red card
- Med pain/instability
- ++ medial swelling
- ++ valgus at 0&30
- ++AD
- ++PD



Patient B.L. - Imaging



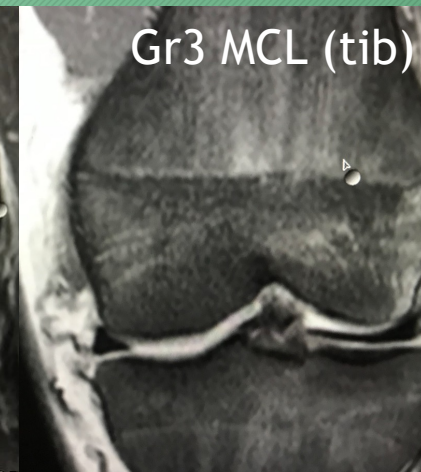
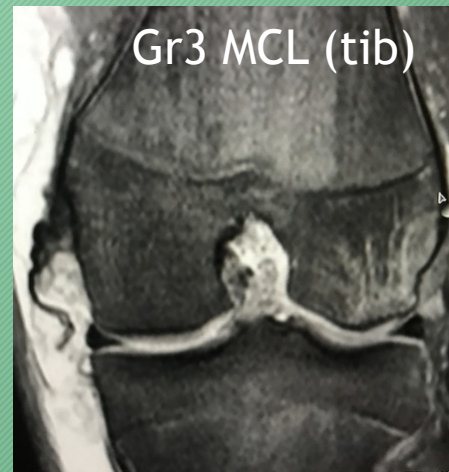
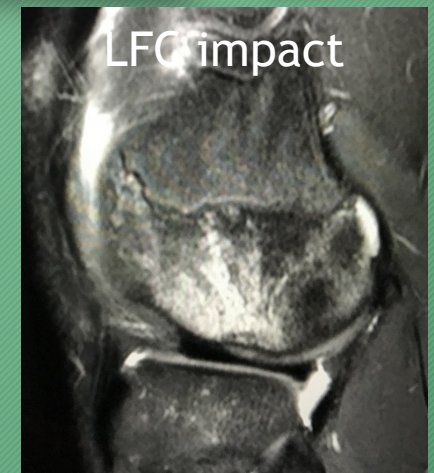
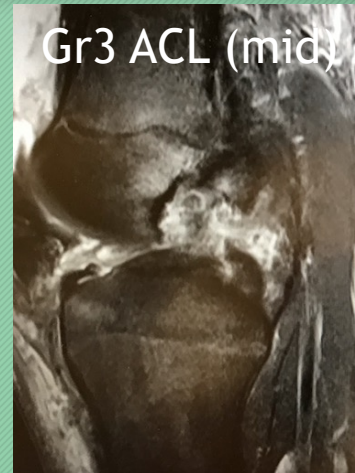
- 16M Left back
- Valgus - red card
- Med pain/instability
- ++ medial swelling
- ++ valgus at 0&30
- ++AD
- ++PD



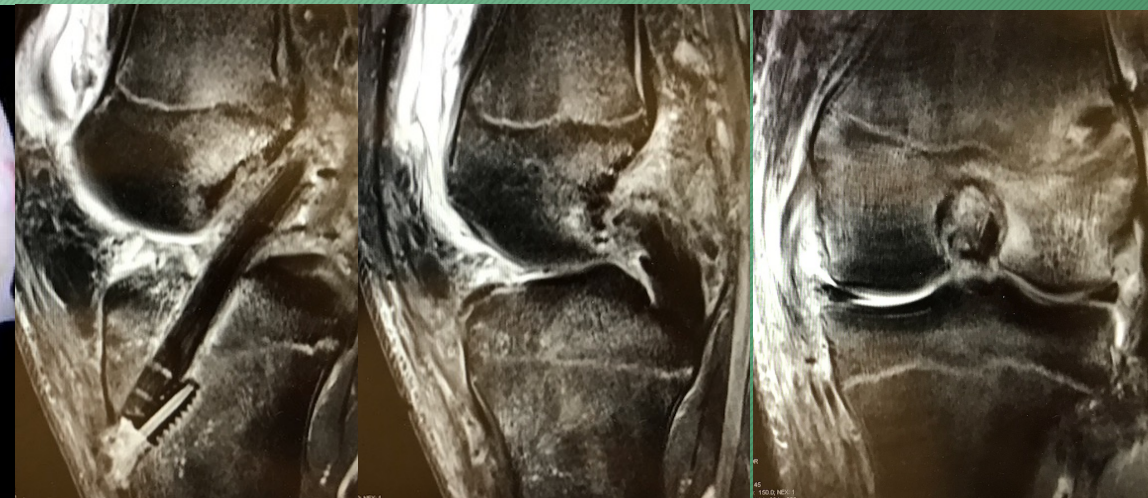
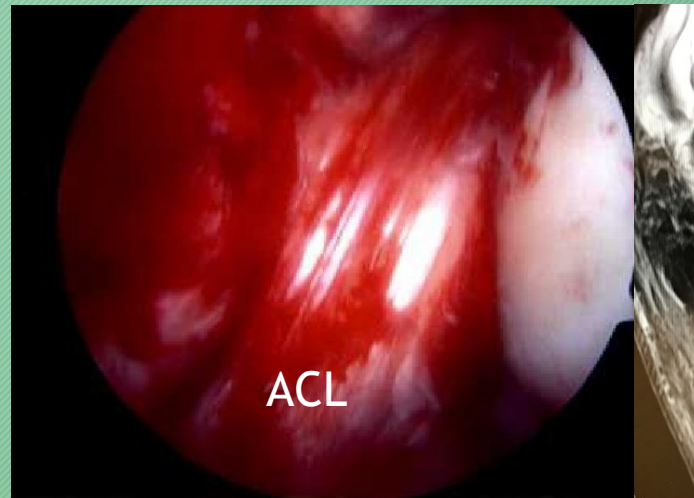
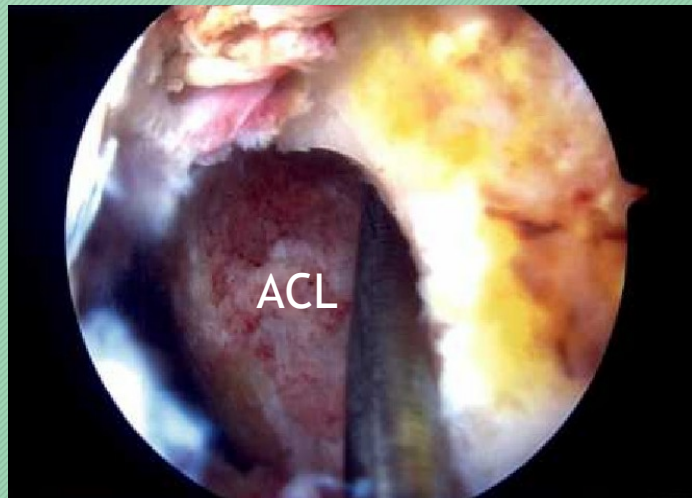
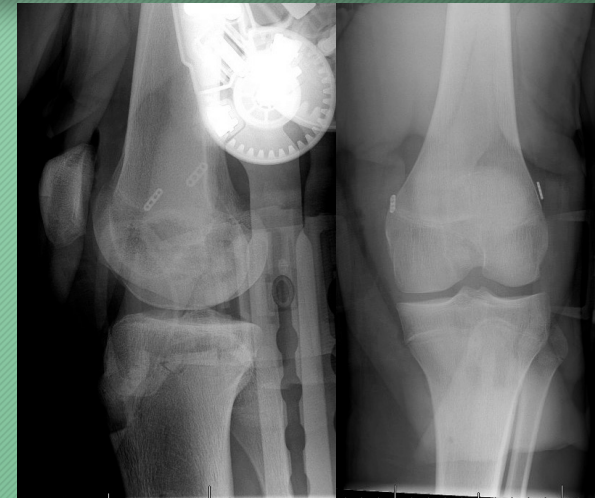
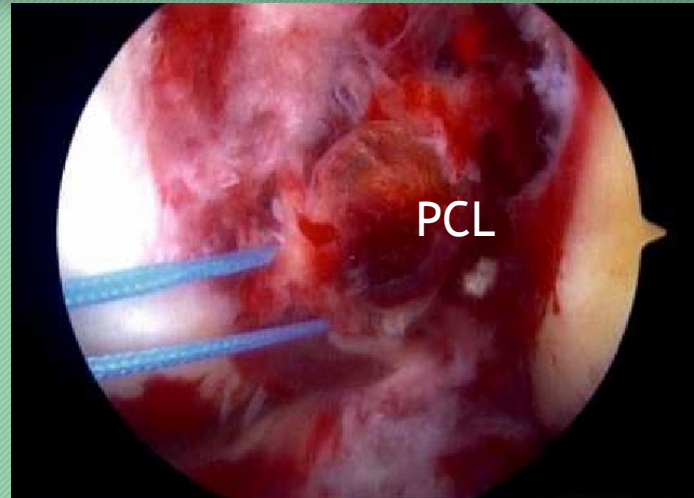
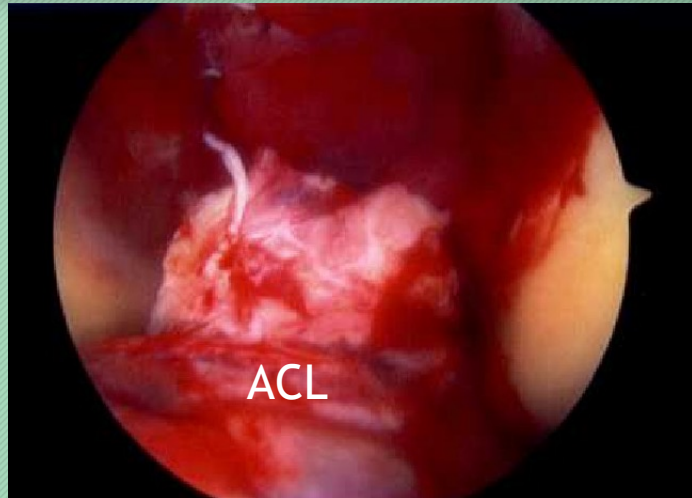
Patient B.L. - What to do?



1. Acute or wait?
2. One stage to two?
3. ACL graft?
4. PCL graft or repair?
5. MCL graft or repair?



Patient B.L. - ACL (BTB), PCL repair, MCL repair



Patient B.L. - 5 yrs f/u



Case R.B.



- 25M w/ L knee pain
- Fell down steps “twisting knee” while intoxicated
- Unable to bear weight
- Seen at local emergency dept., placed in knee immobilizer & discharged to Ortho clinic



Case R.B.



- Day after injury patient evaluated by orthopedic surgeon
- Skin intact, soft compartments
- Knee ROM 15-0-60°
- Painful varus & valgus
- Weakness w/ dorsiflexion
- Sensation: diminished CPn
- Palpable dorsalis pedis pulse



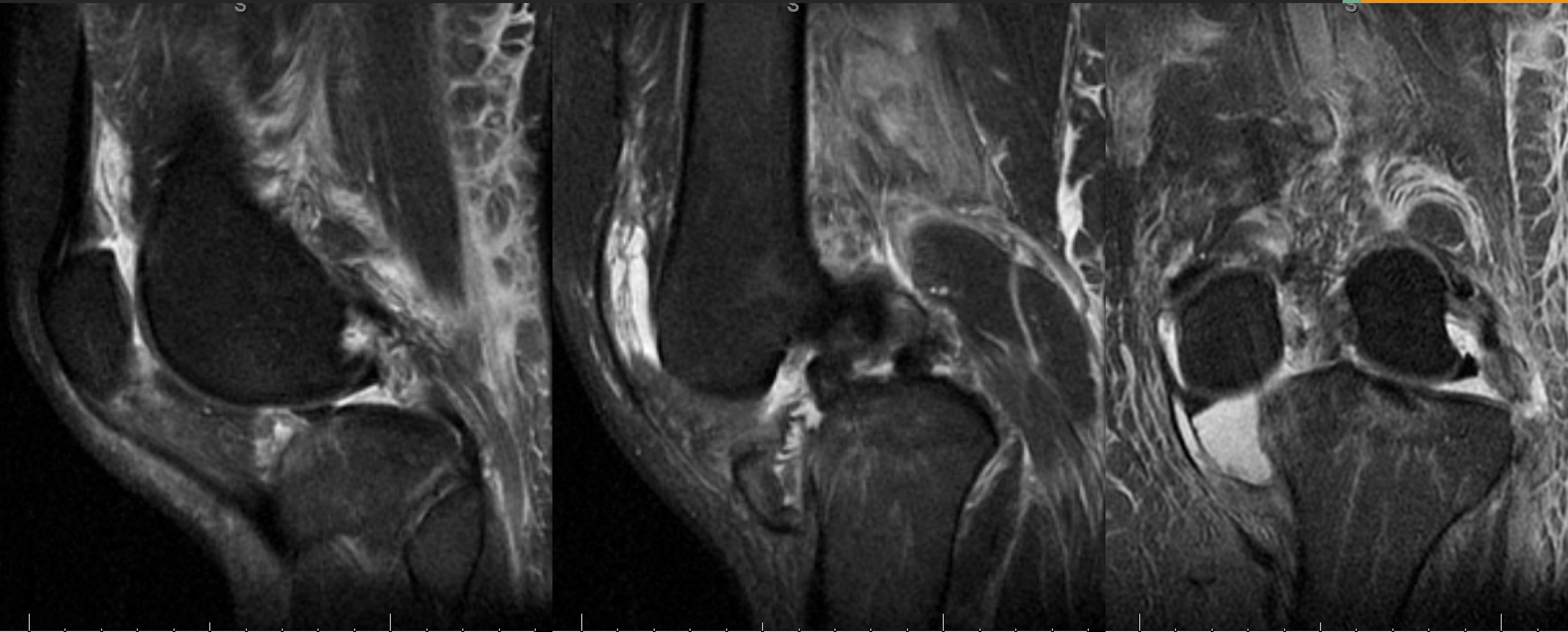
Case R.B. - what to do?



1. Get MRI?
2. Get CT?
3. Temporize in immobilizer?
4. Place in ex-fix?



Case R.B.

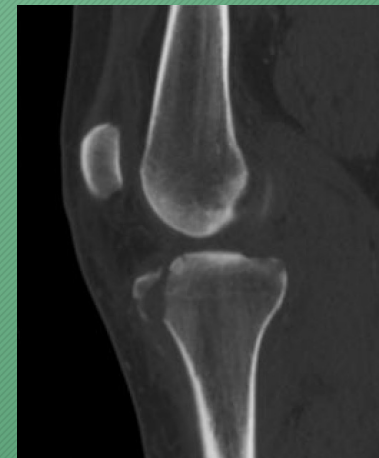
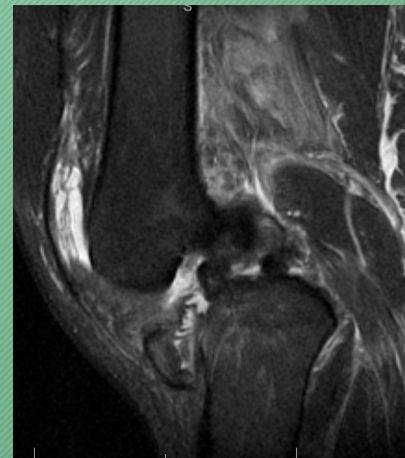
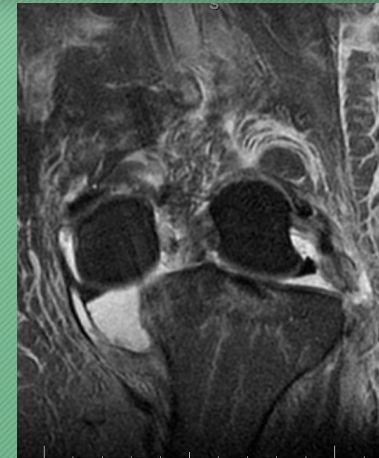
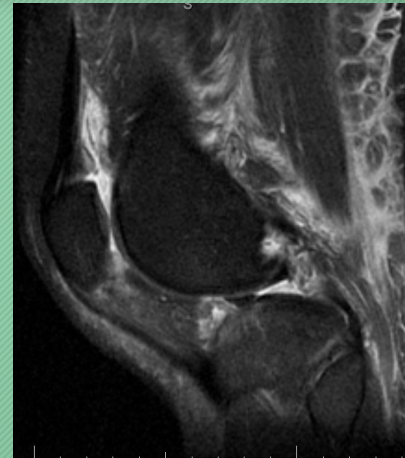


Case R.B. - now what?



- AM tibial plateau rim fracture
- Grade 3 ACL/PCL/PLC (KD3LN)
- Grade 2 MCL (mid)

1. Reduce and fix acutely?
2. Ex fix and temporize?
3. ORIF tibia fx?
4. Ligament reconstructions?



Case R.B. - treatment

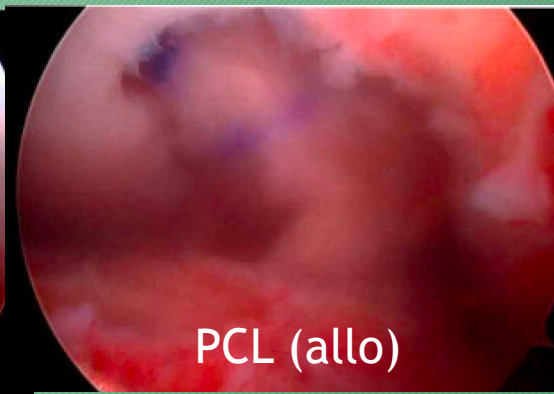
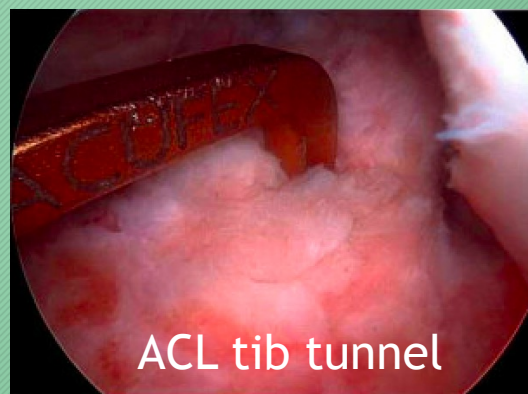
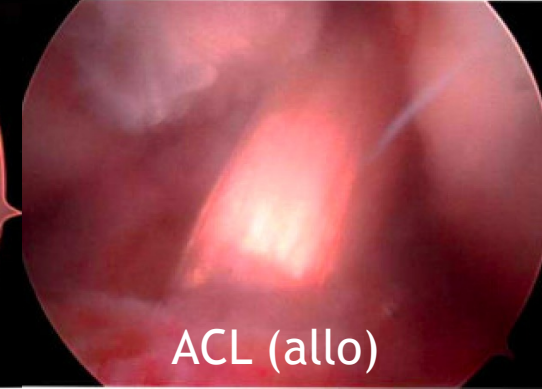


Ex-fix

6 wks

12 wks

1 yr

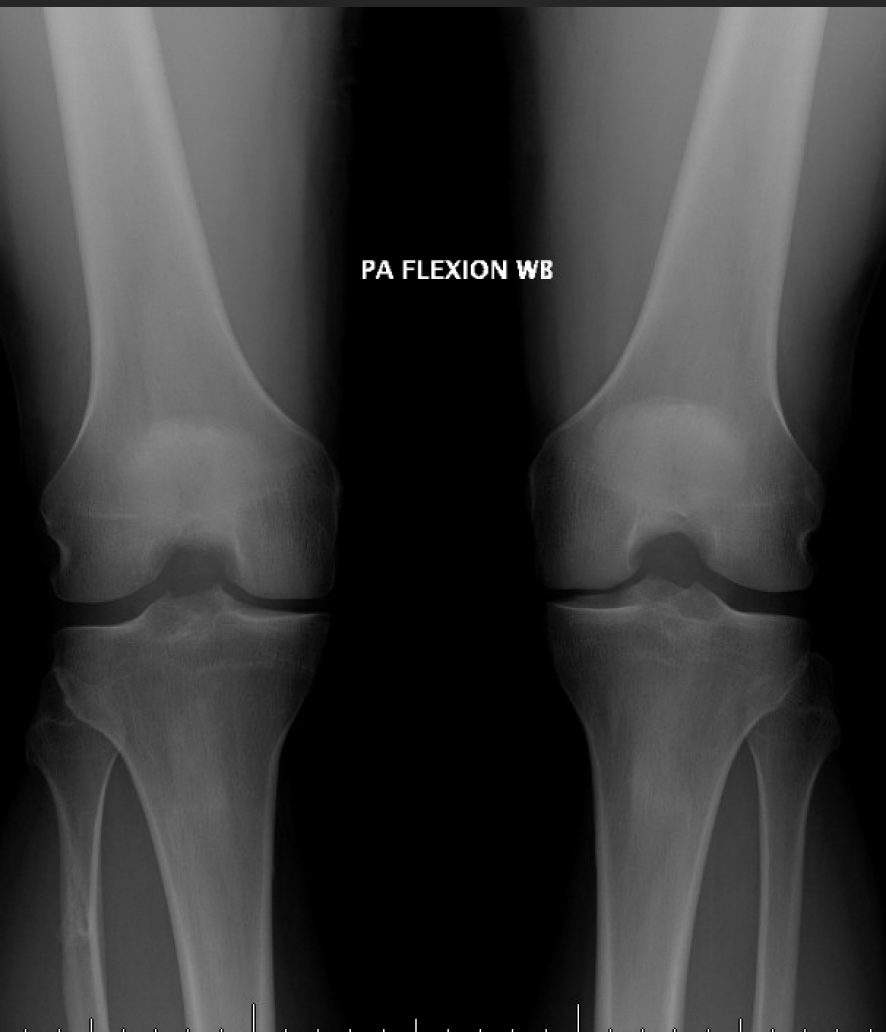


Case R.C.K.



- 45M w/ worsening R knee pain for past few months
- 5y after softball injury - PCL injury treated nonop
- PT + CSI w/o relief, some relief with unloader brace
- Exam
 - Minimal effusion
 - ROM 2-130° (0-130°)
 - 1A Lachman
 - + PD
 - Stable varus/valgus

Case R.C.K.

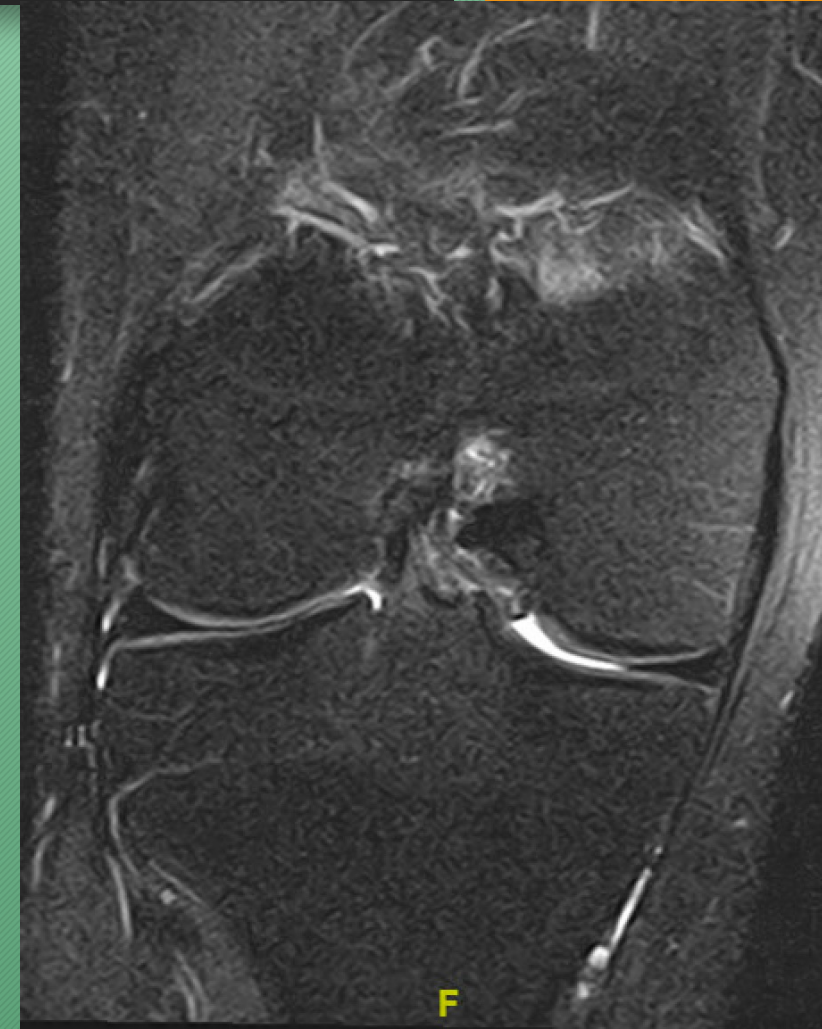
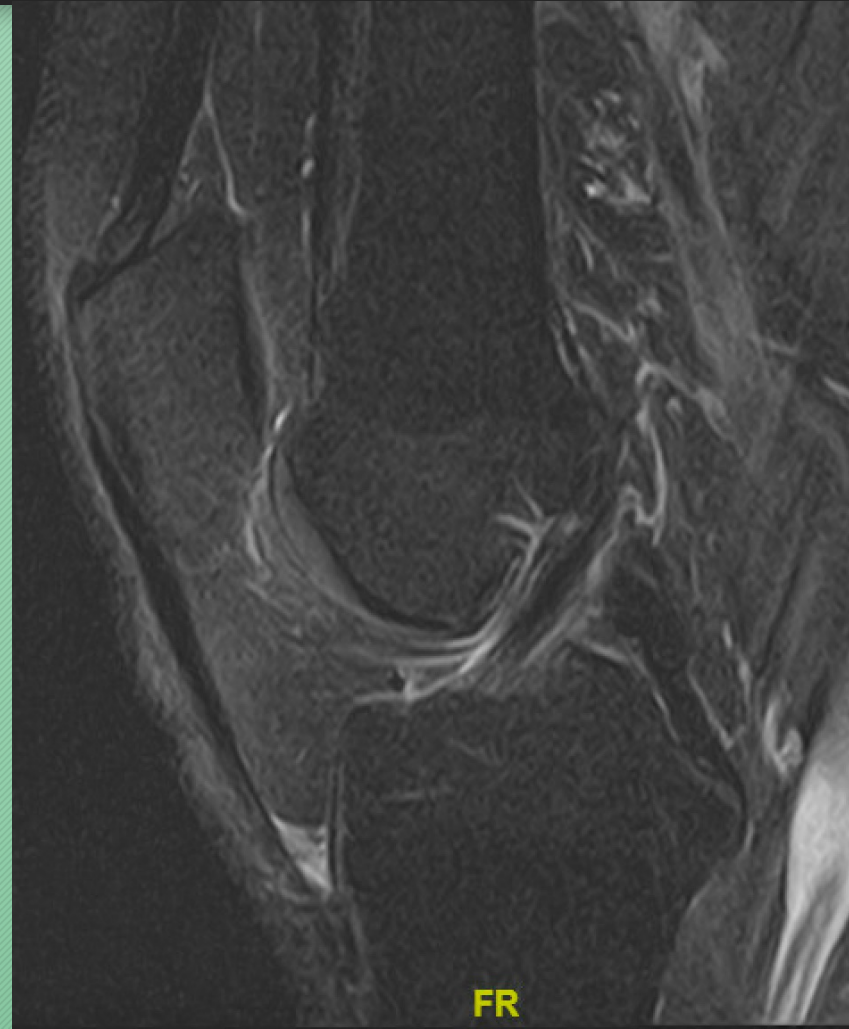
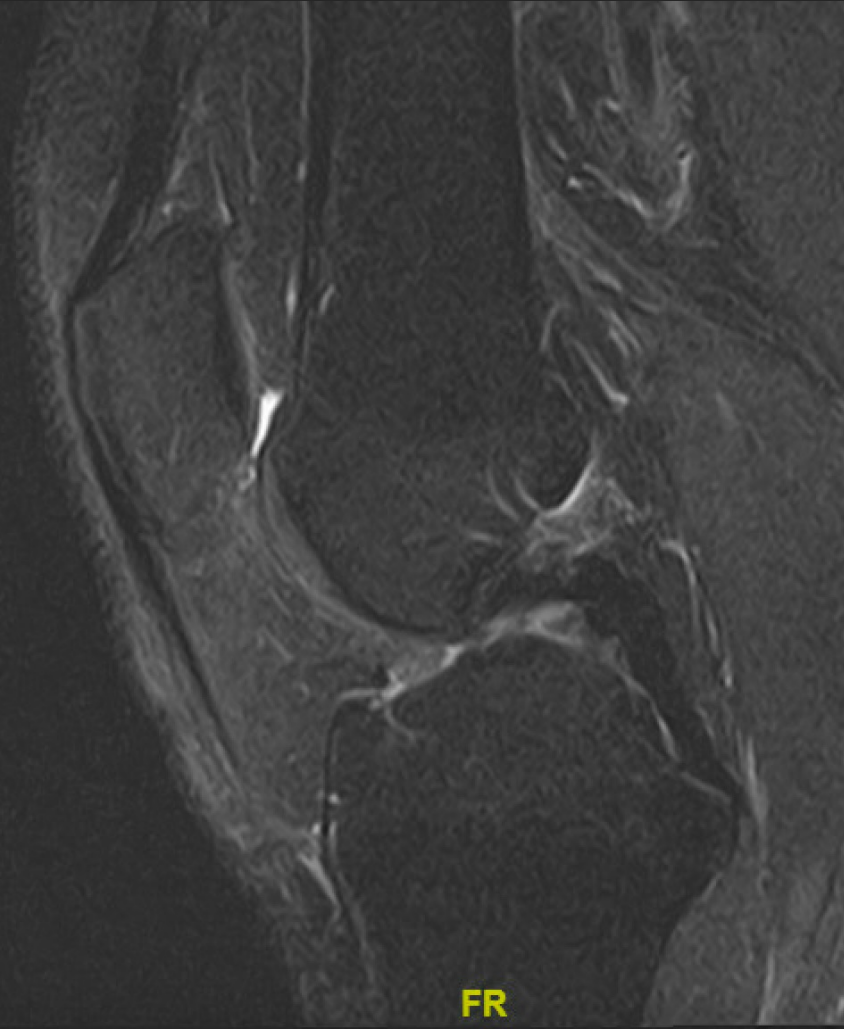


Case R.C.K.

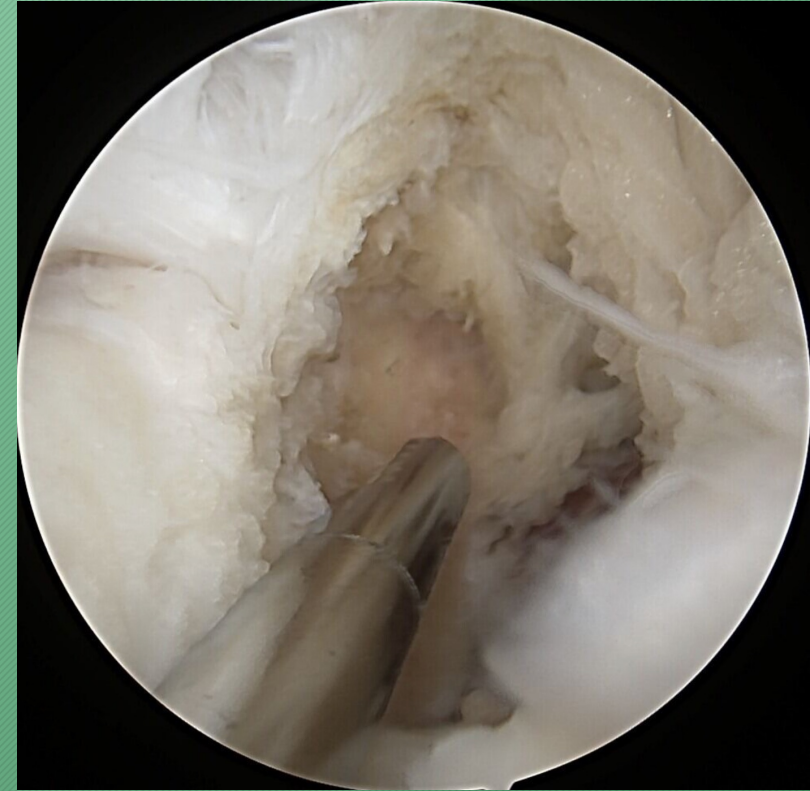
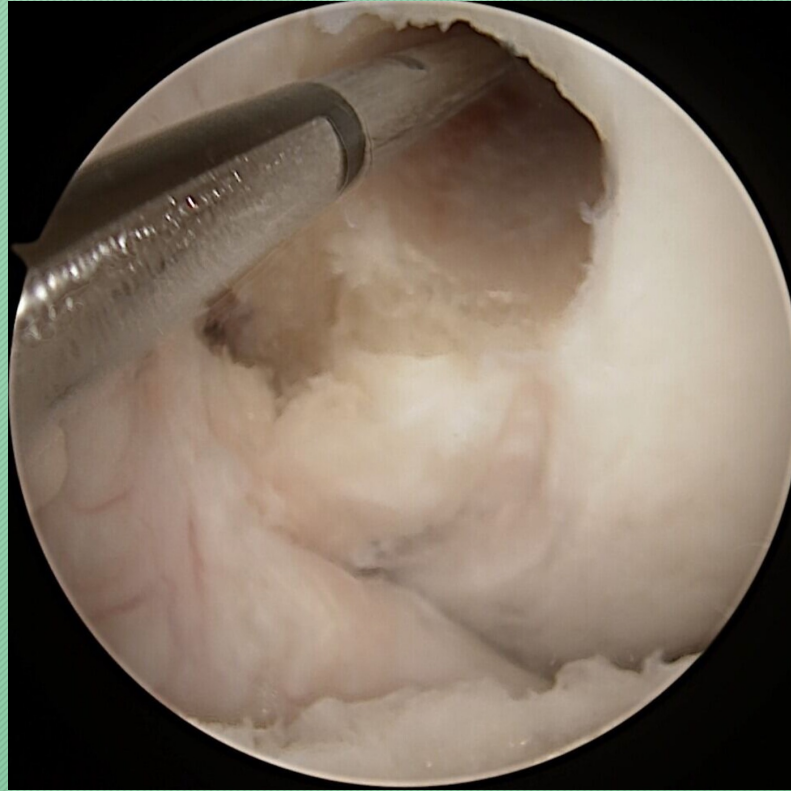


Posterior tibial translation
9mm vs 0mm

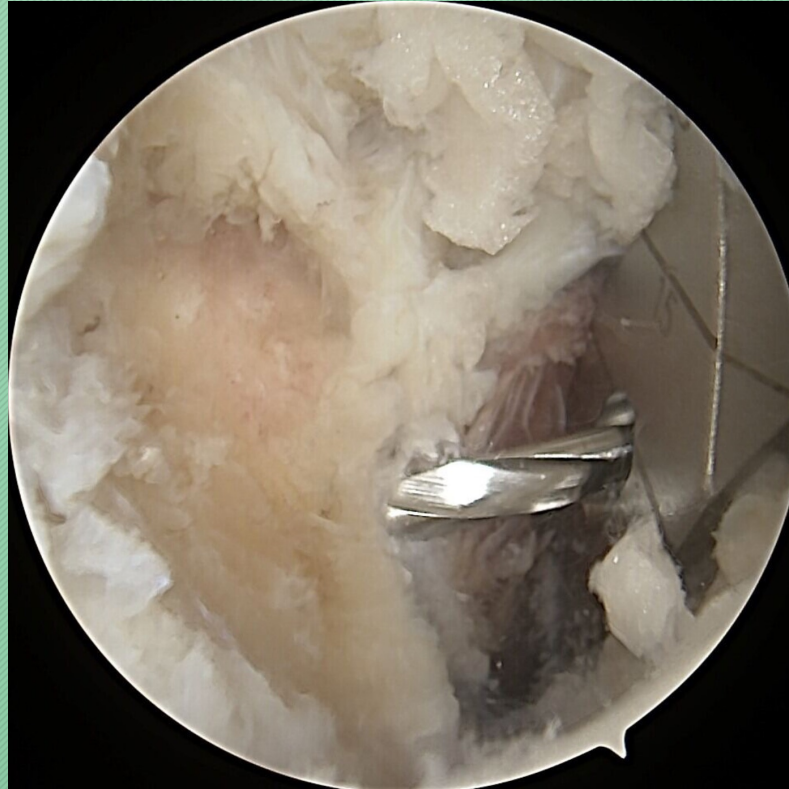
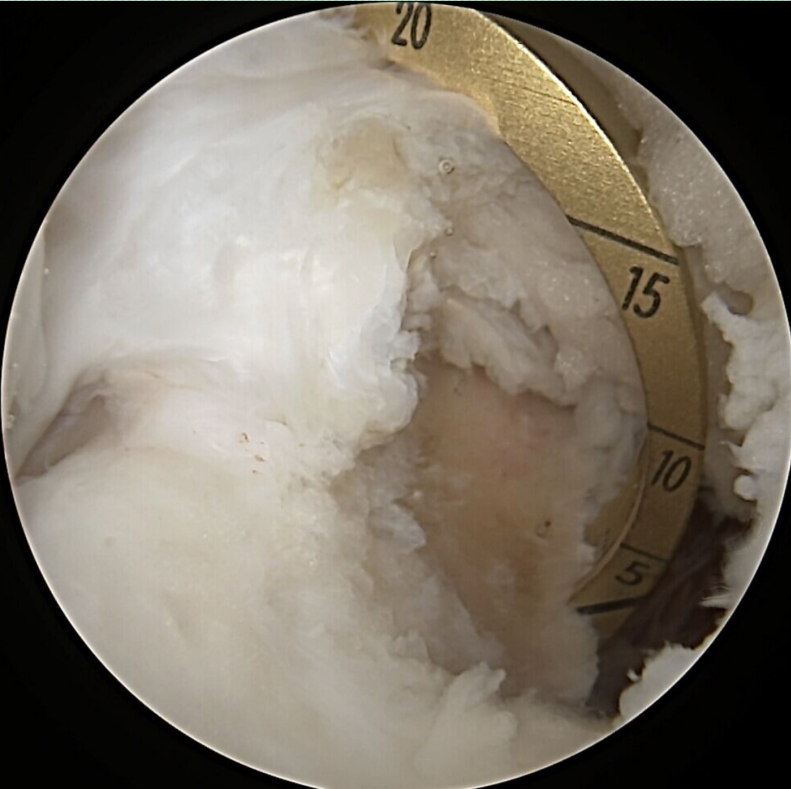
Case R.C.K.



Case R.C.K. - allo PCL-R



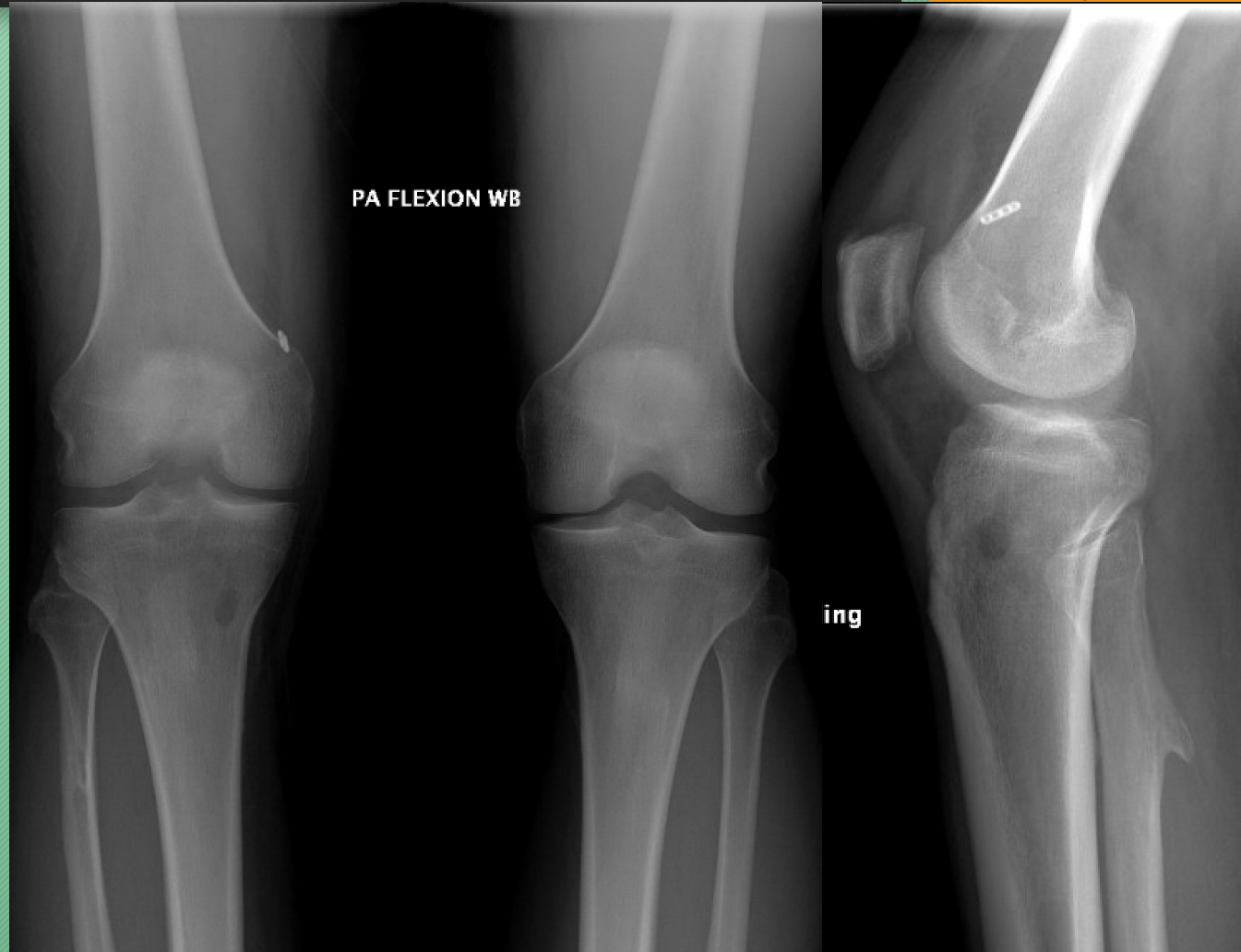
Case R.C.K. - allo PCL-R



Case R.C.K. - 3mos s/p allo PCL-R



- No pain, feels tight in the suprapatellar pouch
- Exam:
 - Small effusion
 - ROM 4-90°
 - Very limited patellar glide
 - 1/4 medial and lateral, limited superior, some inferior
 - Stable PD, no sag



Thank You!

