

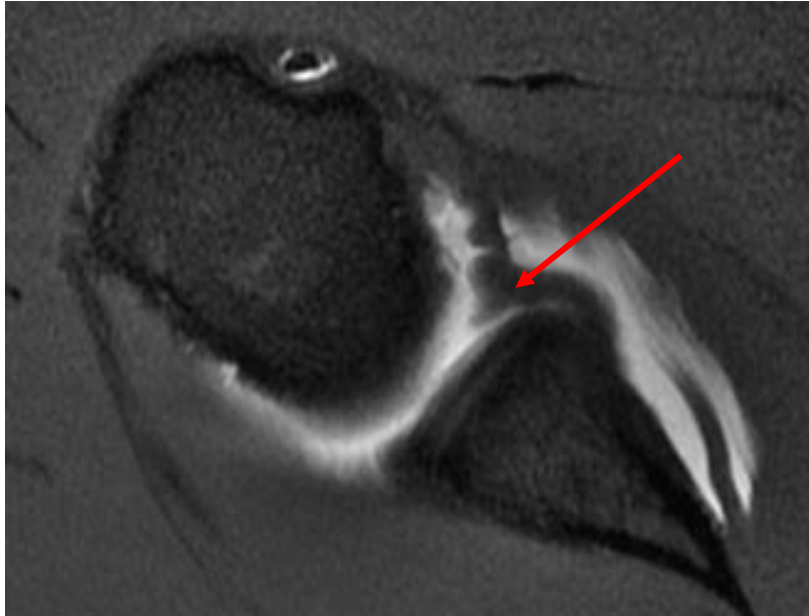
Arthroscopy / MRI Correlation Conference

Department of Radiology, Section of MSK Imaging

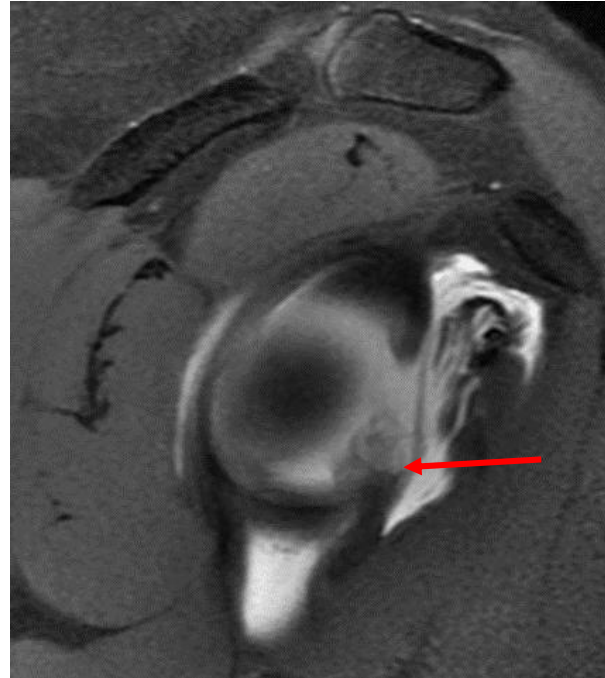
Department of Orthopedic Surgery

7/19/16

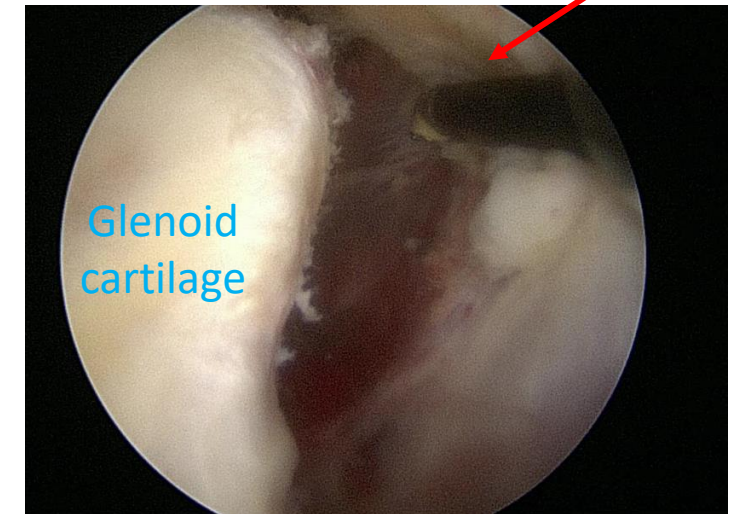
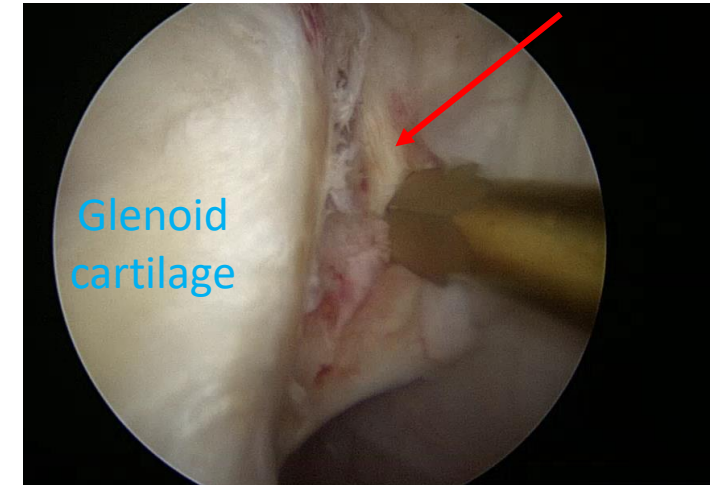
Case 1: 29 YOM with recurrent shoulder dislocations



Axial T1FS MR arthrogram shows tear of the anterior inferior labrum which remains attached to torn and medially stripped periosteum of the scapula (anterior labroligamentous periosteal sleeve avulsion AKA ALPSA lesion)

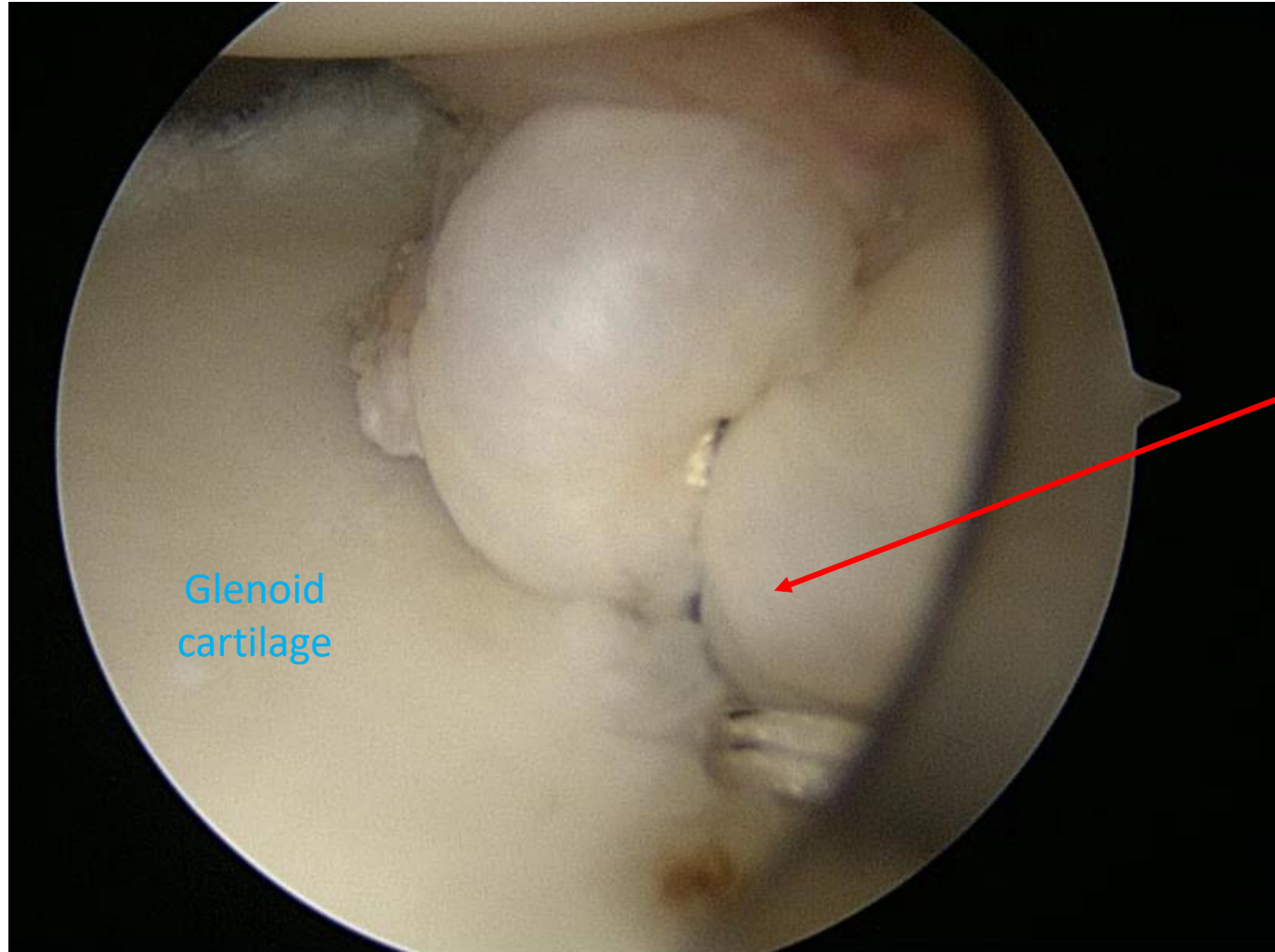


Sagittal oblique T1FS MR arthrogram shows tear of the anterior inferior labrum as part of the ALPSA lesion. This is the same view as seen on the right during arthroscopy.



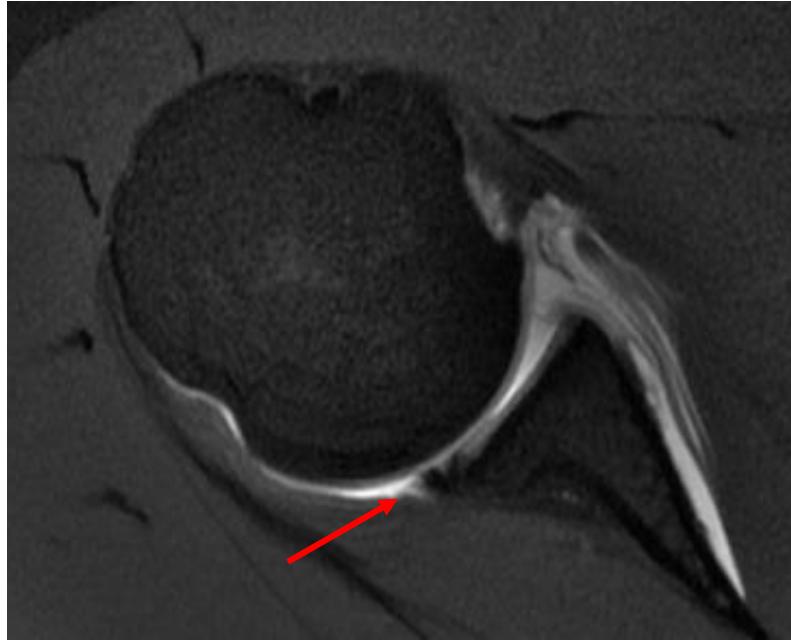
Probe pulls back tear further to show the periosteum is medially stripped

Case 1: 29 YOM with recurrent shoulder dislocations

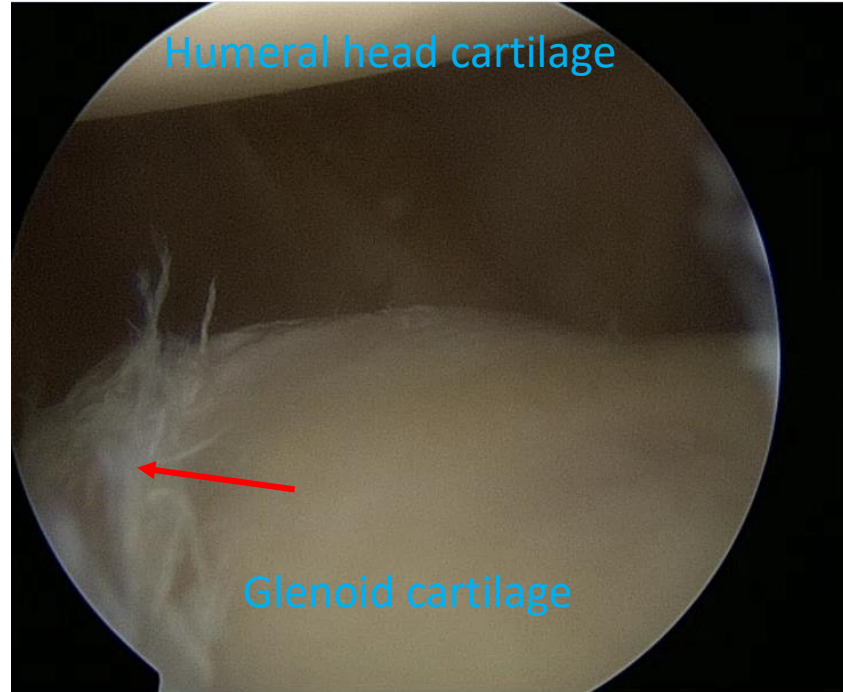


Repaired anterior inferior labroligamentous complex. Sutures hold these structures down at their anatomic locations.

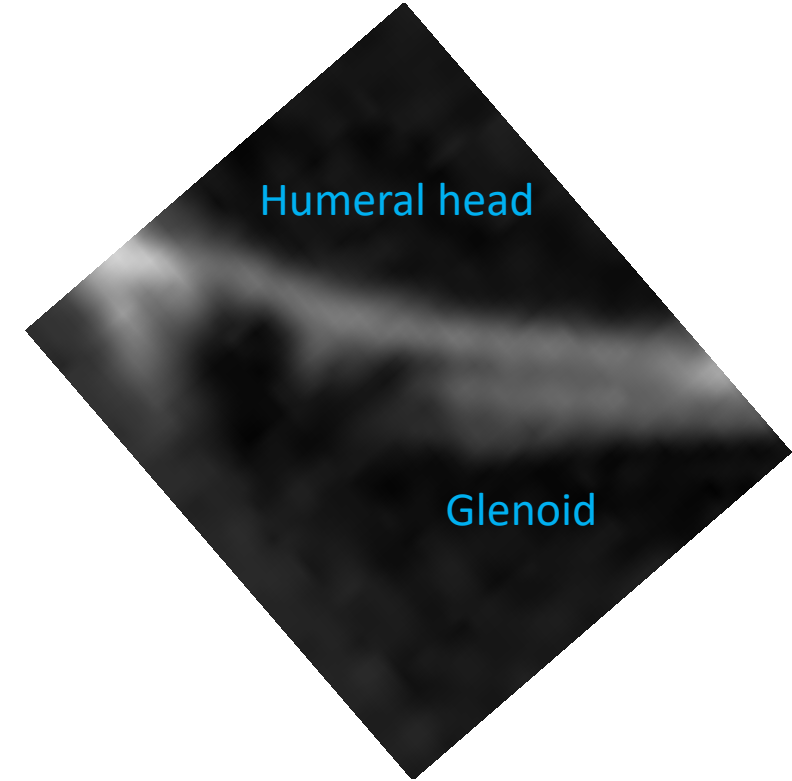
Case 1: 29 YOM with recurrent shoulder dislocations



Axial T1FS MR arthrogram shows fraying of the direct posterior labrum



Arthroscopy shows fraying of the direct posterior labrum (which was debrided at the time of surgery)

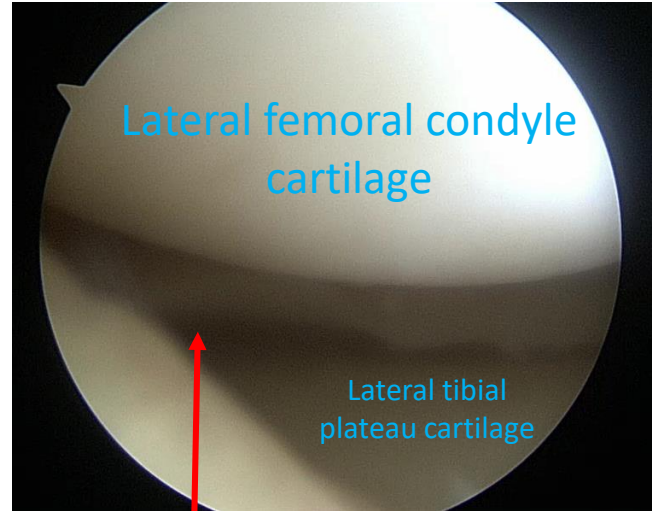


Same MR as on the left but zoomed in to match the field of view from arthroscopy

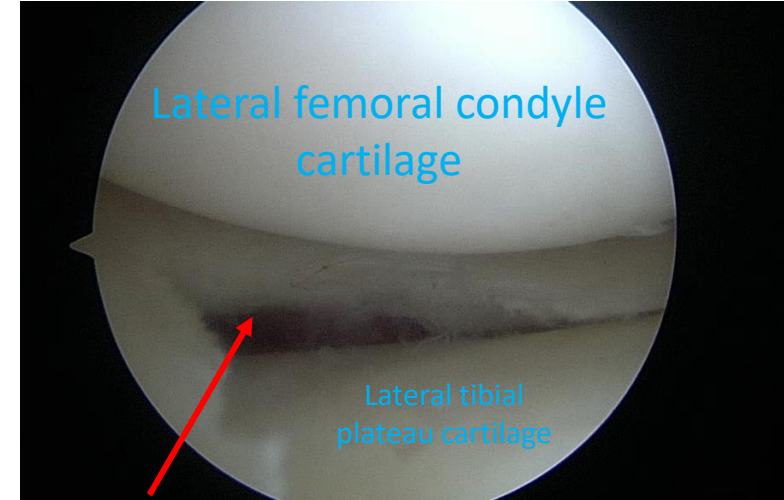
Case 2: 21YOM with pain at the lateral joint line



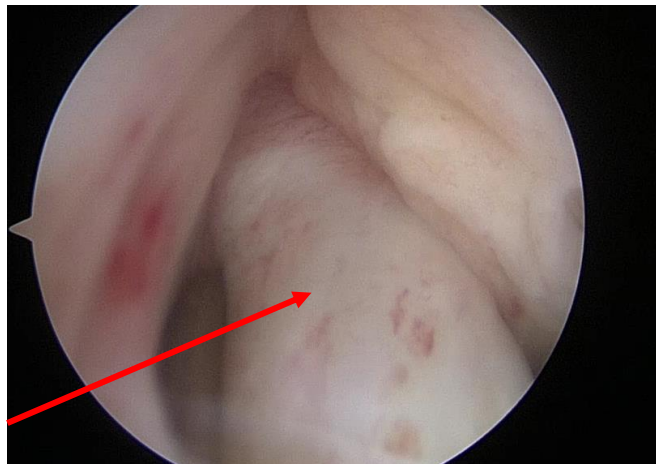
Coronal PDFS MR shows a complex tear of the lateral meniscus



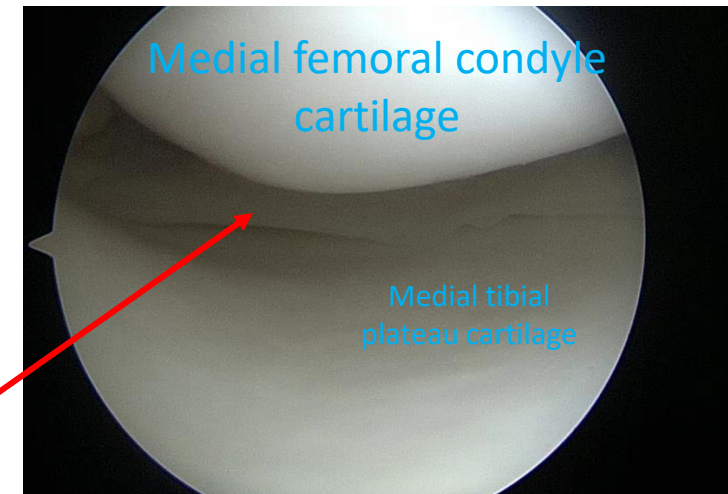
Lateral meniscus tear (blurry image without video to show how probe pulls apart tear, sorry!)



Lateral meniscus tear debrided down to clean margins



Intact ACL in the notch

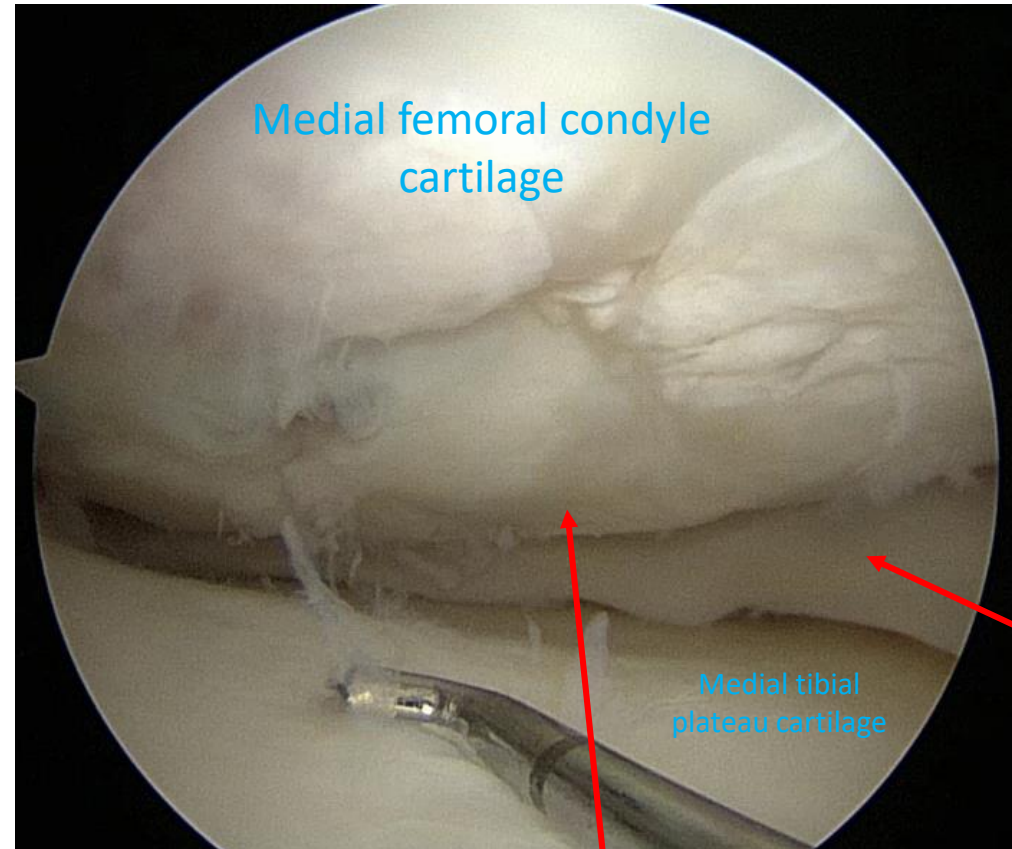


Intact medial meniscus

Case 3: 18 YOM with medial knee pain found to have large unstable OCL in MFC (top left). 10 months later, returns with knee pain



Coronal PDFS MR shows a large osteochondral lesion in the medial femoral condyle undermined by fluid. This was found to have a thin intact cartilage cover at surgery and the cysts below were debrided, bone graft was placed between the sides of the defect and the defect was secured with screws



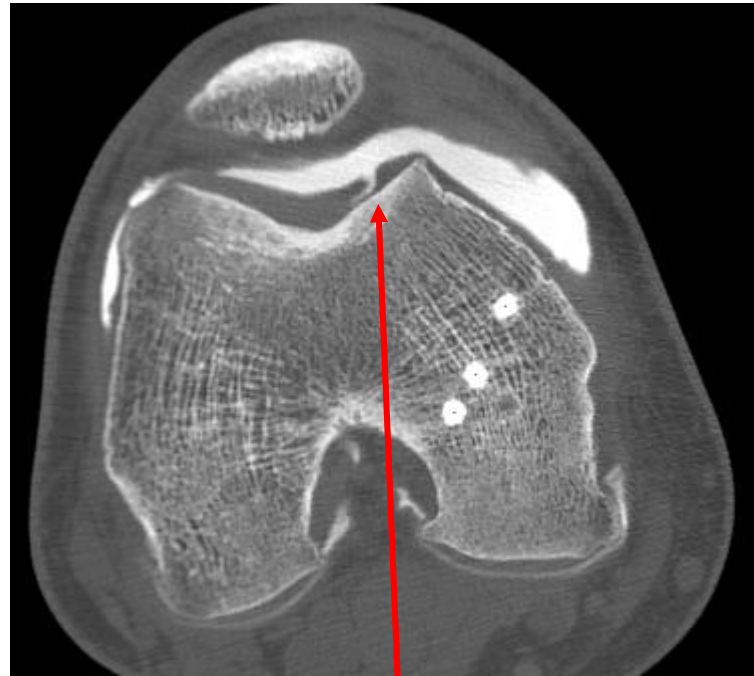
At arthroscopy, the healed OCL appeared stable including with probing.

Medial meniscus

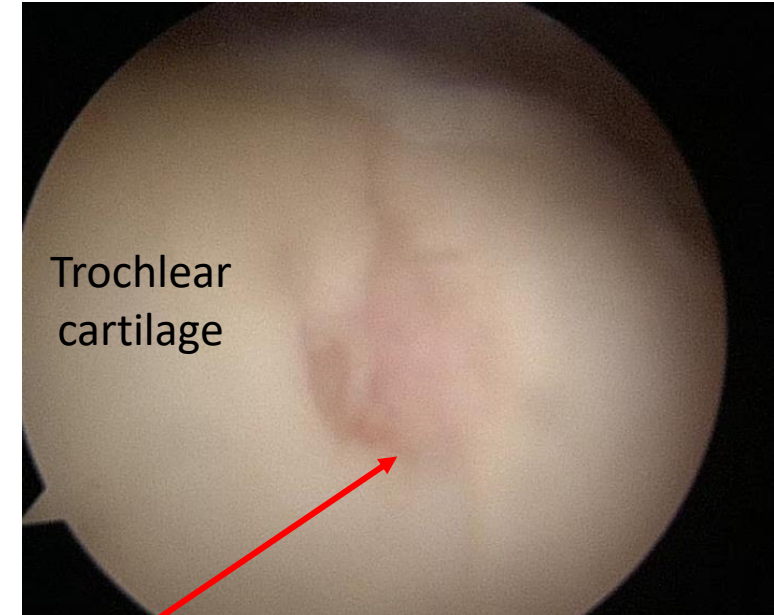
Case 3: 18 YOM with medial knee pain found to have large unstable OCL in MFC (top left). 10 months later, returns with knee pain



Sagittal CT arthrogram confirms stability as no contrast got into the OCL. Screws were not proud but were tightened.

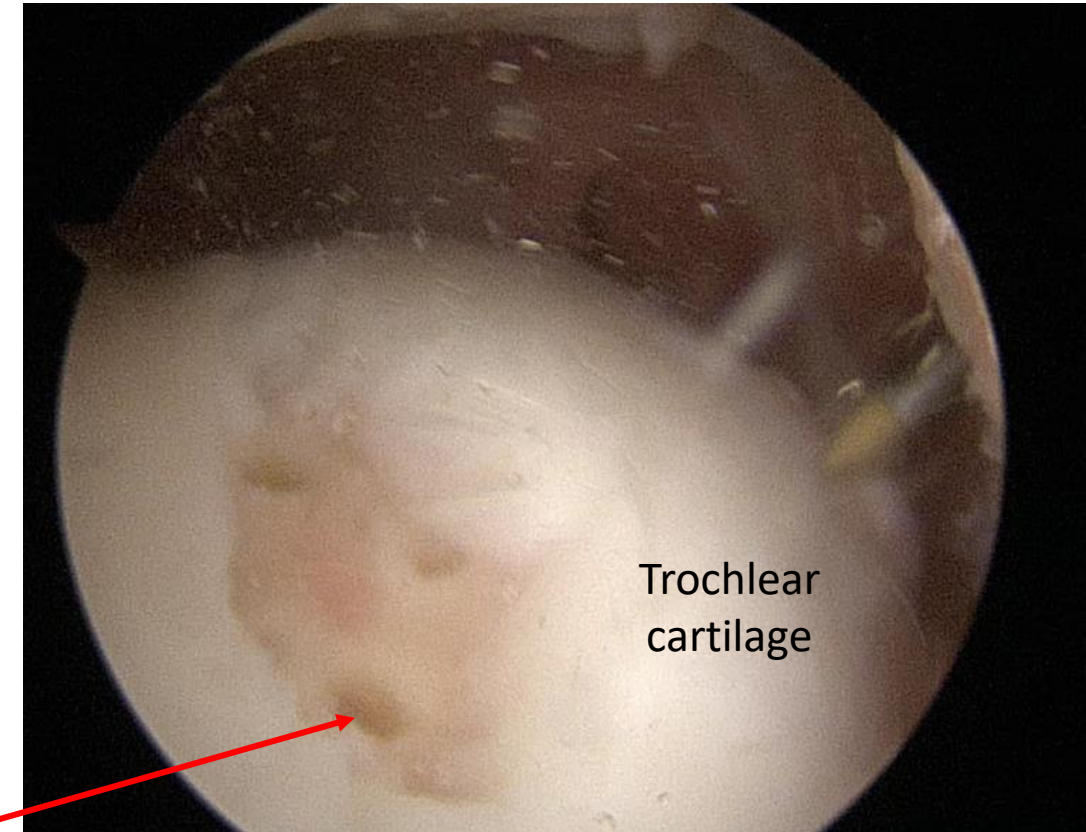


There was a grade 4 defect in the medial trochlea however.



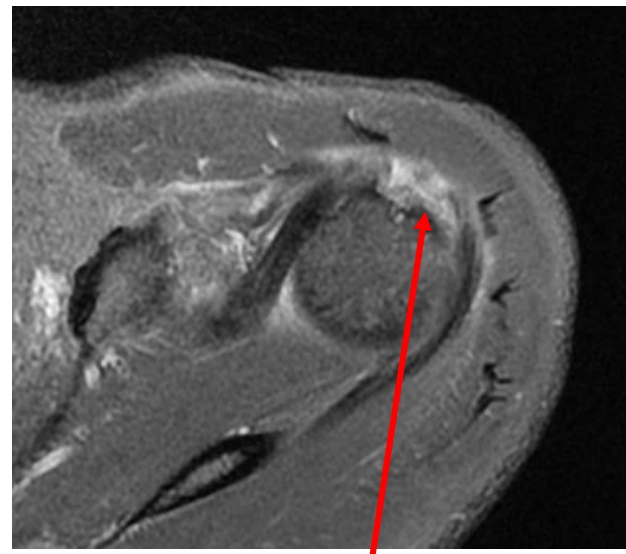
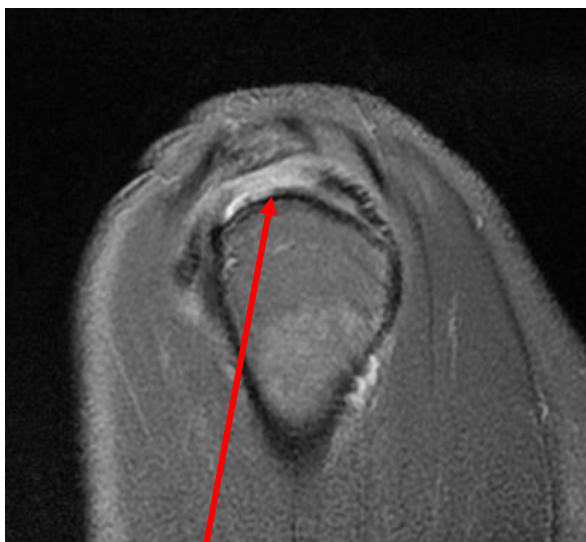
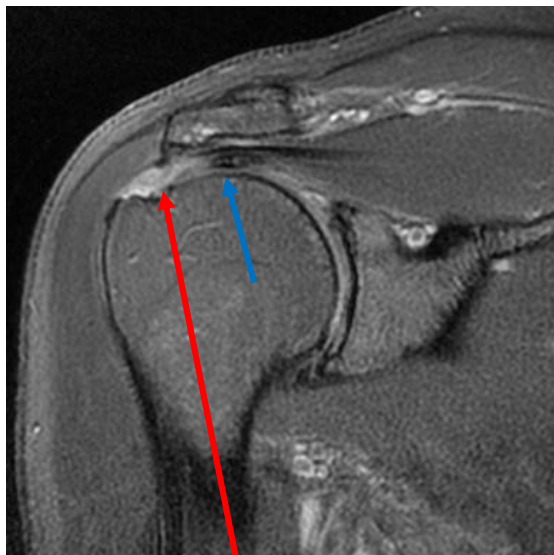
Trochlear cartilage

Case 3: 18 YOM with medial knee pain found to have large unstable OCL in MFC (top left). 10 months later, returns with knee pain

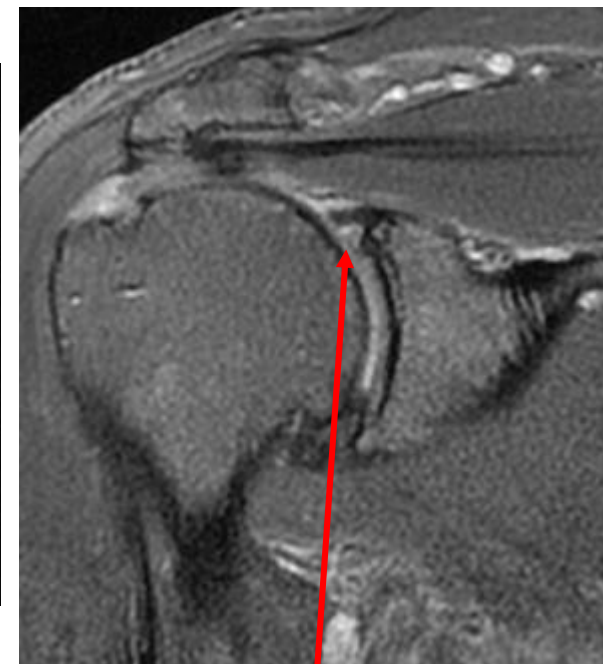


The defect was debrided to a clean base to prevent further delamination and then the subchondral plate was microfractured (holes were poked) to elicit bleeding into the defect with the hopes that factors in the marrow will promote healing

Case 4: 63 YOM chronic shoulder pain

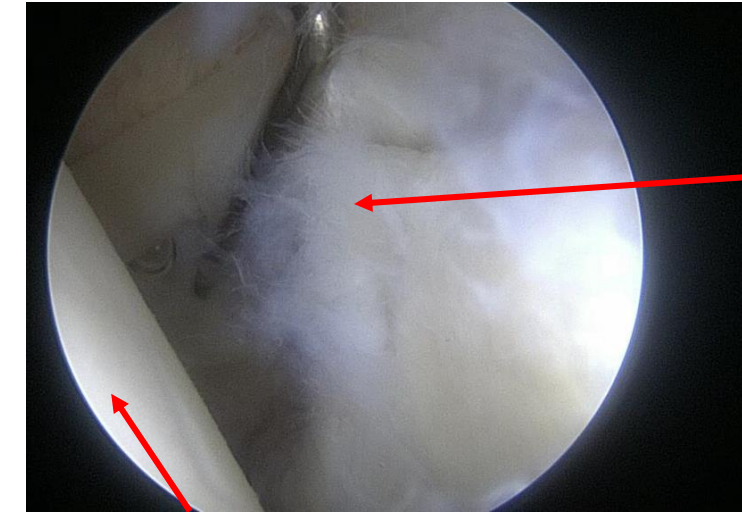


Coronal, sagittal oblique and axial PDFS MR shows a full thickness tear of the supraspinatus beginning at the anterior leading edge and propagating posteriorly to the level of the conjoined tendon. Notice the thickened rotator cable (blue arrow).



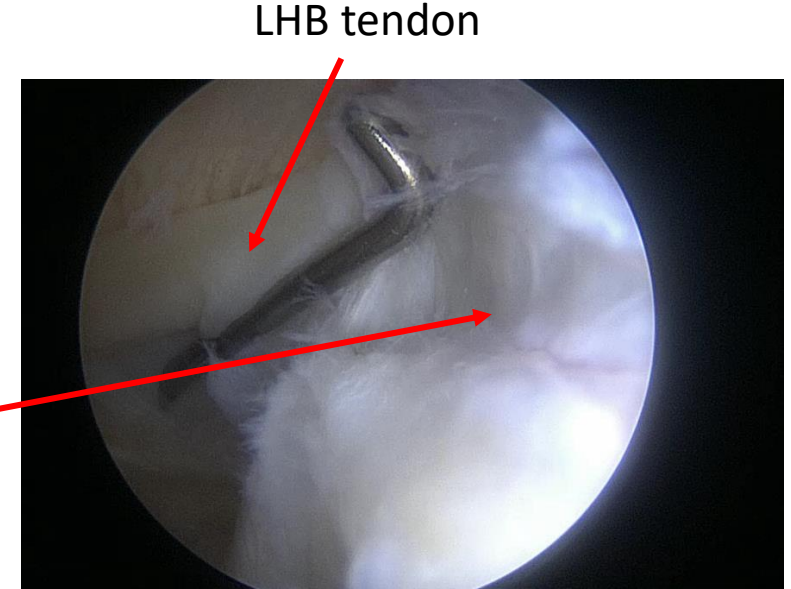
Coronal PDFS MR shows a tear of the labrum from anterior superior to posterior superior (all slices not shown), SLAP lesion.

Case 4: 63 YOM chronic shoulder pain



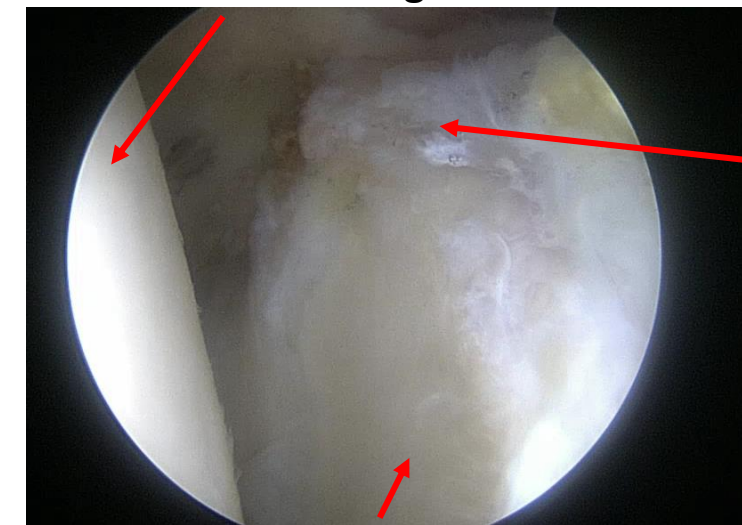
Humeral head cartilage

Top left shows probe pulling up long head of the biceps tendon as it comes to the anchor. The labrum is frayed and degenerated.



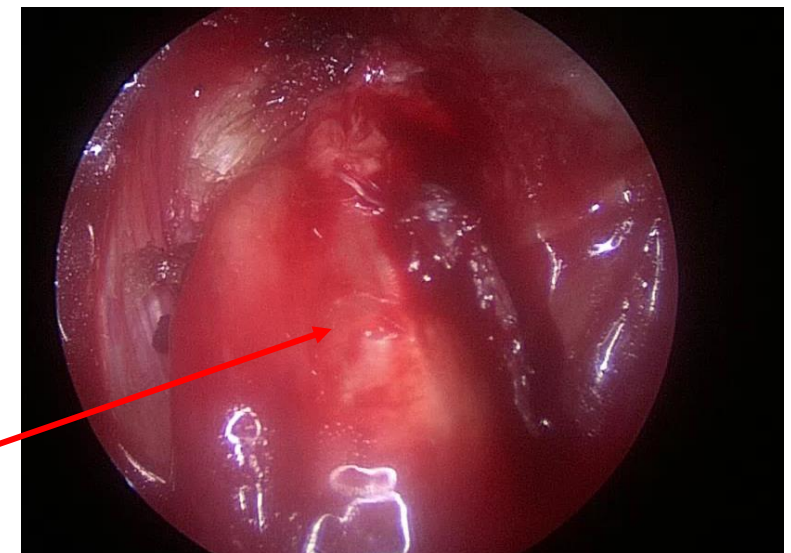
LHB tendon

Top right shows probe pulls up LHB tendon which separates from the labrum due to the SLAP.



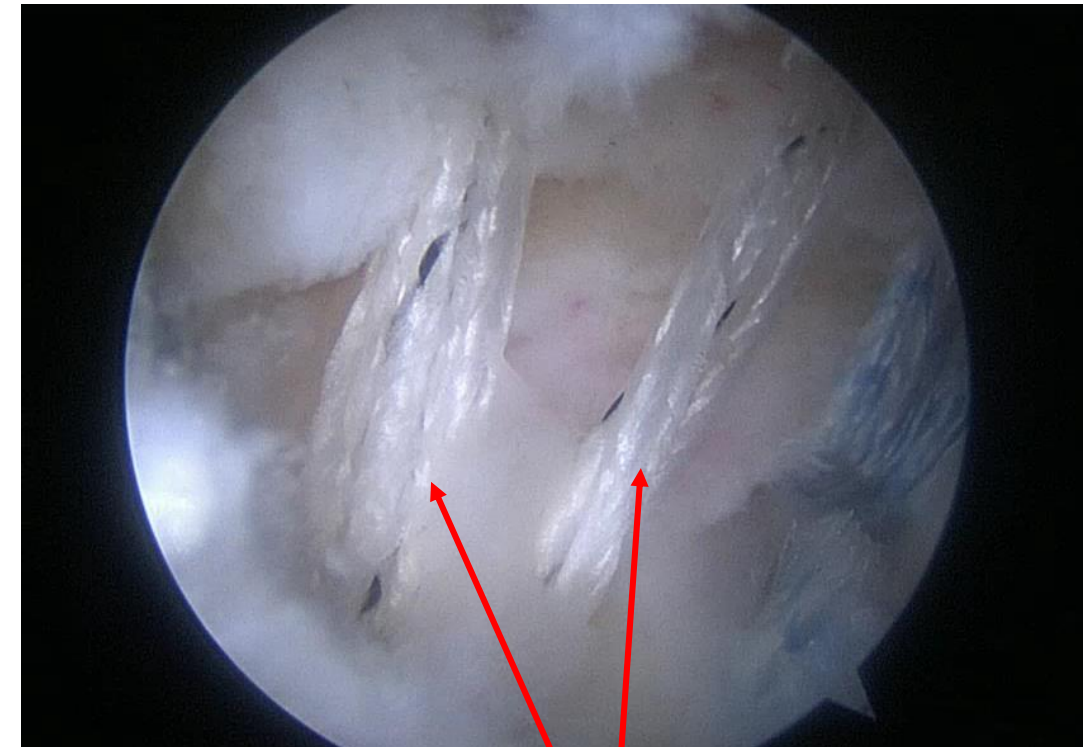
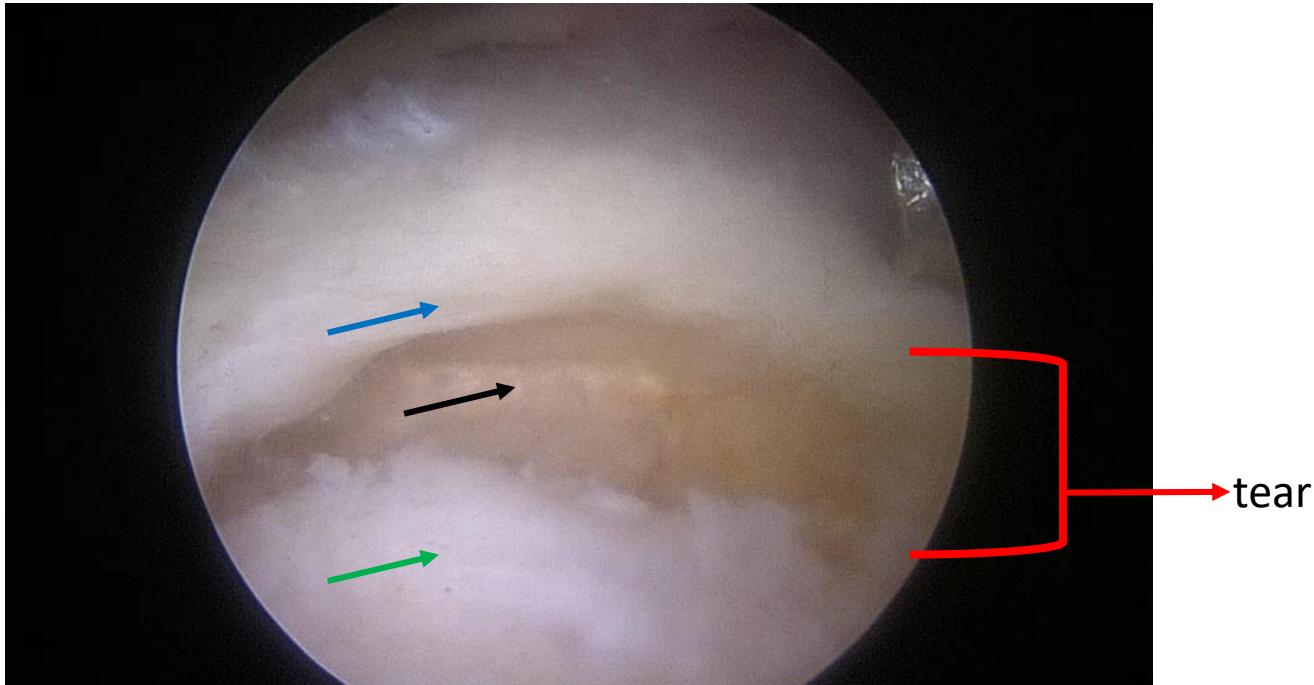
Glenoid cartilage

Bottom left, the LHB has been released and the labrum debrided.



Bottom right, the released biceps tendon is anchored down in the humerus outside of the joint as part of a biceps tenodesis.

Case 4: 63 YOM chronic shoulder pain



The tear is brought laterally toward the footprint and the bone is prepared. Then suture anchors are used to secure the torn tendon back to the foot print.

From inside the joint and looking cranially, the tear of the supraspinatus tendon is seen as is the rotator cable (blue arrow) to which the tear has retracted. Lateral tendon stump is also seen (green arrow). Through the tear and from inside the joint, the subacromial bursa can be seen (black arrow). This is why full thickness tears allow for fluid to migrate from the joint into the SA/SD bursa.