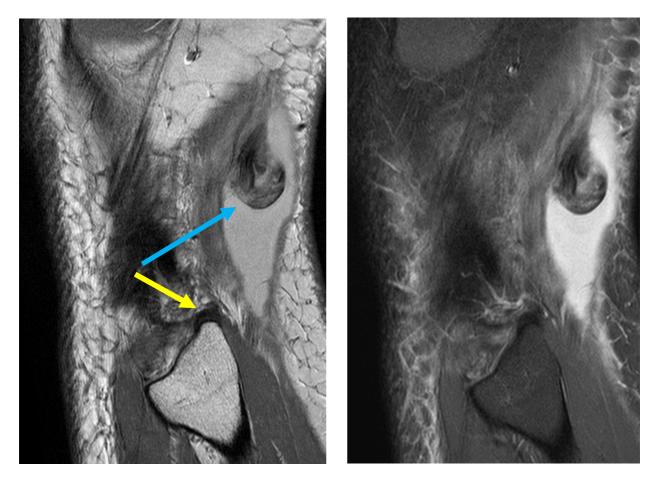
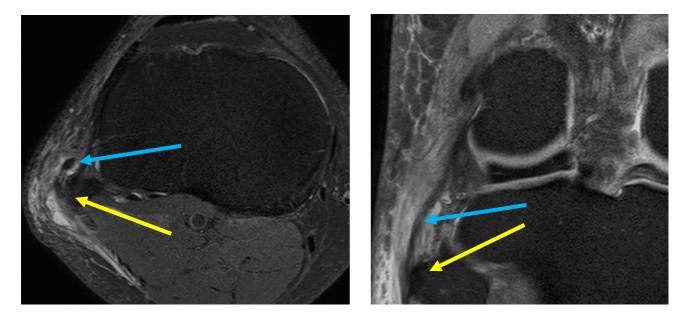
38 M with persistent lateral knee pain, weakness and instability 2/12 post hyperextension / varus injury

MRI Findings:

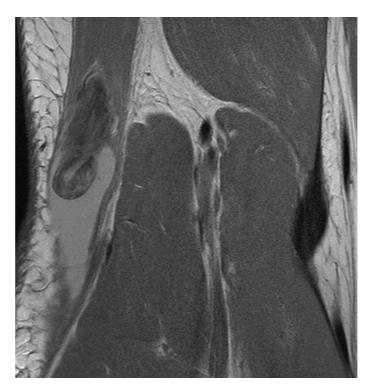
- Complete avulsion and retraction of the distal biceps from the posterolateral corner of the fibula with 5cm retraction – creating a "ball" of tendon
- Irregular fraying of the retracted tendon and moderate volume of fluid surrounds the tendon
- Small residual stump at fibular attachment
- No avulsed fibular head fragment or marrow oedema
- Mild fraying of the distal attachment of the lateral collateral ligament
- Remaining posterolateral corner structures remain intact



Sagittal images illustrate retracted ball of distal biceps tendon; residual fibular stump and lack of marrow oedema



Axial and Coronal PD SPAIR – Intact LCL (*blue*) and lack of bone oedema at BF insertion on fibular head (*yellow*) **Coronal PD** (below) – Nicely demonstrates retracted tendon with surrounding fluid



Discussion

- MRI imaging test of choice (delineates complex posterolateral corner structures and fracture / bone contusion)
- > Isolated rupture of distal biceps femoris tendon is relatively rare
- > Important diagnosis due to its role as a co-stabiliser at the posterolateral corner
- Surgical management often required in athletes and in those requiring high level of function
- > Delayed diagnosis (tendon retraction and muscle atrophy) may require more complex surgery

Further Reading:

Kusma M, et al. Isolated avulsion of the biceps femoris insertion-injury patterns and treatment options: a case report and literature review. Arch Orthop Trauma Surg 2007;127:777–80.

Fortems Y, et al. Isolated complete rupture of biceps femoris tendon. Injury1995;26:275–6. Valente M, et al. Isolated rupture of biceps femoris tendon. Musculoskelet Surg. 2013 Dec;97(3):263-6. Rosas, H. Unraveling the Posterolateral Corner of the Knee. Radiographics. 2016; 36:1776–1791.