Case of the Month

Kate Hames R2 2016
Case Presentation:

24 yo M with right knee pain after twisting his knee and falling while playing basketball

The patient has difficulty weight bearing and says the knee feels “unstable.” There is a positive anterior drawer test

Radiographs are ordered for further evaluation
Radiograph Findings:

Radiographs demonstrate an avulsion fracture of the lateral tibial plateau. The alignment of the knee is otherwise maintained.

These findings are in keeping with a Segond Fracture.
Segond Fracture

A Segond fracture is an avulsion of the lateral tibial rim cortex secondary to avulsion of the lateral capsular ligament.

70-100% of Segond fractures are associated with an ACL tear.

65-75% are associated with medial or lateral meniscal tears.

Other associated injuries include avulsion of the fibular collateral ligament and avulsion of the fibular attachment of the long head of biceps femoris.

MRI is required to assess for further ligamentous injury.
Segond Fracture MRI

Avulsion of the lateral tibial plateau with disruption of the LCL with ACL tear
Treatment:

Orthopedic referral is required, and surgery is often necessary to repair the ACL and LCL to restore stability to the knee.
Reverse Segond fracture

Avulsion fracture of the medial tibial plateau secondary to avulsion of the MCL. These fractures are associated with PLC injury.
Pellegrini-Stieda Lesion

Ossified, post-traumatic lesion of the MCL adjacent to the medial femoral condyle, favoured to be secondary to avulsion of the MCL at the medial femoral condyle. These are more chronic lesions, and the calcification is usually seen 2-4 weeks after the initial injury.
References:


Radiopaedia.org

Statdx.com