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## Knee MRI, Now and Beyond

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The whole length of the ACL is visualized in sagittal MR images with the knee slight flexion (important point!). Imaging appearance of chronic ACL tear becomes variable, including, loss of ACL, discontinuous band, and continuous band with elongation. Ageing or accumulation of microtrauma may lead to mucoid degeneration within the ACL, including "celery stalk ACL".

PCL tear may be accompanied by avulsion fracture of the deep layer of MCL. This is called "reverse Segond fracture", and it occurs as a result of valgus and external rotation of the distal lower limb. Because of the proximity of the deep layer of MCL to the medial meniscus, reverse Segond fracture may be accompanied by medial meniscal tear.

Oblique meniscomeniscal ligaments (OMML) connect the lateral and medial menisci in the diagonal fashion. Its prevalence is rare (1-4% for both medial and lateral combined). Its origin at the posterior horn can be mistaken as a meniscal tear.

Among the cases with traumatic patellar dislocation by MRI, 61% cases were not diagnosed as dislocation by clinical evaluation. Axial MR imaging with fluid-sensitive sequences (FS-PDWI, FS-T2WI, STIR etc) is mandatory to demonstrate both the patella and the femoral condyle.

Patello- femoral friction syndrome is localized injury to the superolateral aspect of the Hoffa's fat pad. It is said to be caused by impingement between the patellar tendon (patella) and the lateral femoral condyle. The lesion located in the superolateral aspect of the Hoffa's fat pad shows hypointensity on T1WI and hyperintensity on FS-T2WI.

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