

Browser's Notes

Published online: 18 February 2021
© ISS 2021

Pseudotear sign of the anterior horn of the meniscus

Kang CW, et al.
Arthroscopy. (2021); 37(2):588–97 PMID 32890637

The MR appearance of the transverse geniculate ligament, *a.k.a.* transverse intermeniscal ligament, and its meniscal attachments were retrospectively reviewed on knee MRIs of 101 patients (mean age 42, 60 male). The transverse ligament was visible in 67% knees, most often as a single bundle (91% of ligaments), but occasionally with 2 (6%) or 3 (3%) bundles. Most ligaments (83%) were within the intrapatellar fat pad, while 16% were in close contact with the tibial plateau and “creeped on the articular surface.” The lateral meniscal attachment of the ligament was invariably at the anterior-superior edge of the anterior horn. However, the attachment of the ligament to the anterior horn of the medial meniscus varied with 5 patterns: superior edge (32%), anterior-superior edge (22%), posterior-superior edge (21%), posterior edge (18%), and anterior edge (6%). The meniscal attachments mimicked tears for only 4 menisci (3 lateral and one medial). For all four, the “Grade 3” linear signal of the pseudotear was angled anterior-inferior to posterior-superior on sagittal images and the connection to the remainder of the transverse ligament could be identified. Knowledge of the variations of attachment of the transverse ligament to the medial meniscus can help avoid misdiagnosis of meniscal “psuedotears”.

Assessment of malreduction standards for the syndesmosis in bilateral CT scans of uninjured ankles.

Kubik JF, et al.
Bone Joint J. (2021); 103-B(1):178–83 PMID 33380196

CT measurements that have been previously recommended to assess the adequacy of ankle fracture reduction include: side-to-side differences in the mean, anterior, central and posterior syndesmotic widths, fibular rotation, sagittal translation, and syndesmotic area, and the unilateral measurement of incisural asymmetry. These values were retrospectively measured independently by 3 observers on a convenience cohort of 213 patients (mean age 43 years, 62% female) with uninjured ankles who had bilateral ankle CT images performed for lower limb rotational assessments. Inter- and intra-observer variation (intraclass correlation coefficients) ranged from 0.72–0.92. Using the recommended cutoff values for the diagnosis of ankle fracture malreduction, the authors found a wide variation (7% - 89%) in the prevalence of “abnormal” measurements for the uninjured ankles. Unilateral incisural asymmetry exceeded the recommended threshold in 89% of uninjured ankles, while side-to-side differences in the posterior syndesmotic distance and sagittal translation exceeded the recommended limit for 15% and 12%, respectively. In all, bilateral measurement comparison resulted in 35% of patients that would have been diagnosed with a poorly reduced ankle syndesmosis. The authors indicate that the currently recommended radiological measures are not adequate for differentiating the natural asymmetry of the ankle syndesmosis from inadequate fracture reduction.

Abstracted by C. S. Winalski, M.D.
May 2021.

Publisher's note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.