Anterior Translocation of the Tibia at MR Imaging: A Secondary Sign of Anterior Cruciate Ligament Tear. Vahey TN, Shelbourne KD, Hunt JE: *Radiology* 187:817-819, 1993

The authors evaluated measurement of the degree of anterior subluxation ("translocation") of the tibia in regard to the femur as a predictor of anterior cruciate ligament (ACL) tear. Eighty-nine magnetic resonance (MR) imaging studies of patients with either and arthroscopically confirmed intact (n=29), acutely torn (n=27), or chronically torn (n=33) ACL were retrospectively reviewed. The degree of translocation was measured on hard-copy images by using two methods. Buckling of the posterior cruciate ligament (PCL) was also evaluated. Anterior tibial translocation, when measured at the midsagittal plane of the lateral femoral condyle with regard to a plane parallel to the cephalocaudal axis of the image, was a relatively specific indicator of ACL disruption. Subluxation of 5mm or more had 58% sensitivity, 93% specificity, and 69% accuracy for an ACL tear. All knees with subluxation of 7mm or more had torn ACLs. Buckling of the PCL was less sensitive and less accurate than anterior translocation as an indicator of ACL disruption.