



Correlation of Joint Line Tenderness and Meniscus Pathology in Patients with Subacute and Chronic ACL injuries. Shelbourne KD, Benner RW. *J Knee Surg.* (In Press)

We evaluated joint line tenderness (JLT) as a test for meniscus pathology in 3531 patients who underwent anterior cruciate ligament (ACL) reconstruction at >30 days after injury. If the patient had no additional giving-way episodes after the index ACL injury, the injury was considered subacute; otherwise, the injury was considered chronic. Immediately before surgery, the presence or absence of medial or lateral JLT was evaluated. The presence or absence of medial and lateral meniscus tears was documented during ACL reconstruction. In the subacute population, JLT was 41% sensitive, 56% specific, and 50% accurate for detecting medial meniscus tears and 57 % sensitive, 44% specific, and 49% accurate for detecting lateral meniscus tears. In the chronic population, JLT was 55% sensitive, 50% specific, and 52% accurate for detecting medial meniscus tears, and 46% sensitive, 52% specific, and 50% accurate for detecting lateral meniscus tears. The presence of JLT alone should not be used in the clinical decision-making process to guide treatment.

Results: Intraobserver reliability was above $r^2=0.90$ for all measurements. In patients with patellar dislocations, the mean congruence angle preoperatively was 33.5° compared with 12.1 mm for linear displacement ($r^2=0.92$). The mean congruence angle postoperatively was 11.2° compared with 4.0 mm for linear displacement ($r^2=0.89$). For normal subjects, the mean congruence angle was -3°, and the mean linear displacement was 0.1 mm.

Conclusions: The linear displacement measurement was found to correlate with congruence angle measurements and may be an easy and useful tool for clinicians to evaluate patellofemoral congruence objectively.