

Knee Special Tests: Anterior and Posterior Cruciate Ligament Testing

Special tests for the knee are pertinent to everyday clinical practice. It is important for clinicians to use these tests to acknowledge potentially injured structures as well as make clinical decisions such as developing a plan of care or referring out to other healthcare providers.



PLAY PICMONIC

Anterior Cruciate Ligament Testing

Lachman Test

Lock-man

During the Lachman test, the patient will be lying supine on the bed, and the clinician will place the patient's testing knee in about 20-30 degrees of flexion. The clinician will then place one hand behind the tibia and the other hand on the patient's thigh. While pulling the hand behind the tibia forward, an intact ACL should prevent hypermobility anteriorly, with a firm end feel. An abnormal end-feel that is soft may indicate a positive test, be sure to test both sides.

Anterior Drawer Test

Ant-eater Drawer

The patient will be lying supine on the bed during the anterior drawer test, and the clinician will flex the testing knee to 90 degrees with the hip flexed to 45 degrees. The clinician will stabilize the lower leg by sitting on the forefoot. The clinician will then grasp the patient's proximal tibia with two hands, placing their thumbs on the tibial plateau and distributing an anteriorly directed force to the tibia on the femur. A positive test is indicated by excessive anterior translation of the tibia on the femur with diminished or an absent end-point.

Lateral Pivot Shift Test

Ladder Pivot Shift

During the lateral pivot shift test, the patient will be lying supine with the testing knee in extension, the hip flexed and abducted to 30 degrees with slight internal rotation. The clinician will hold the knee with one hand and the foot with the other hand, and a valgus force combined with knee flexion will be applied through the knee. A positive test will be indicated by subluxation of the tibia - as the knee is flexed, the tibia will clunk backward at about 30-40 degrees of flexion.

Posterior Cruciate Ligament Testing

Posterior Drawer Test

Post-terrier Drawer

During the posterior drawer test, the patient will be lying supine, and the testing knee will be flexed to 90 degrees. The clinician will stabilize the lower leg by sitting on the forefoot. The clinician will then grasp the patient's proximal tibia with two hands, placing their thumbs on the tibial plateau and distributing a posteriorly directed force to the tibia on the femur. A positive test is indicated if there is a lack of end-feel or excessive posterior translation compared to the other side.

Posterior Sag Sign

Post-terrier Sagging Sign

During this test, the patient will lie supine with the testing knee at 45 degrees of hip flexion and 90 degrees of knee flexion. The clinician will observe for any posterior "sag" compared to the position of the femur. A positive test is the appearance of a sag.