

Get a Leg up on Your ACL Test

Performing a quick and easy ACL test in a game situation should determine whether it is safe for a player to return to the field of play. A false negative may put the player at risk by sending them back into the game. Subsequently, the player may do more structural damage to the adjacent meniscus or collateral ligament. In the most extreme cases, the player may risk dislocation with possible amputation of the lower leg, if the blood supply is compromised. After the initial pain and shock, players will sometimes try to go back in the game on their own. For their protection and your liability it is paramount you have a definitive test.

Many problems arise after such trauma has occurred. The player is apprehensive because the pain and subluxation are recent memories. They do not want to repeat this anytime soon. That tension is commonly transferred into a guarding mechanism causing the muscles to tighten around the joint. The Lachman's test can feel for this tightness but does not address the problem of lifting a heavily muscled leg in the air. The anterior drawer test (ADT) is more abrupt, with many times having to sit on the foot to stabilize the lower leg. Incidents of knee dislocation can occur with the sudden jerk of the ADT.

Many ACL's are first seen by a licensed or certified athletic trainer. In the past, ATCs and LATs were usually athletic males with large hands. They could easily perform the Lachman's on most of the athletes of the past. The profession has changed. Female ATC's are becoming more and more common. Performing a Lachman's on a 300# lineman by someone with small hands is virtually impossible. I have devised an ACL test that is more accurate than the Lachman's, puts the player at ease, can easily detect the hamstring firing, and least of all, can be performed by anyone with small hands.

The method (Parker Drawer) can be performed on the field of play or on a treatment table. Once the initial shock and pain has subsided, verbally relax the player. Question the player as to how it happened and any noises or sensations they felt. A definitive pop or snap which may be audible to the players around them combined with abnormal joint movement are positive signs for a torn ACL. Add posterior lateral knee pain and the diagnosis should be simple.

First palpate the knee to rule out any boney problems or ancillary structure damage such as MCL or LCL (medial or lateral collateral ligament). The assessment will now focus on the ACL. Gently bend the knee and slide your opposite thigh underneath their involved thigh. (pic1) The anterior portion of your thigh is important in detecting the firing of their hamstrings. Your hand closest to the trunk cups the patella proximally stabilizing the femur.(pic2) The first digit can be used to approximate the excursion of the tibia on the femur. Find the joint line and put the finger end at the anterior lateral position.(pic3) The opposite hand will manipulate the tibia from a posterior position on the proximal tibia.(pic4) A gentle upward glide of the tibia at this point should confirm any ACL laxity. The PD should then be performed on the opposite leg.

An astute professional can determine between a 2-3 mm differences in the shift of the tibia on the femur. ACL's usually will swell over an extended period of time period (up to 24 hours). If there is immediate, inexplicable swelling of the knee, check distal pulse, splint, and transport for x-ray. Hopefully, the PD method will turn these usual ACL wrestling matches into a gentle glide and allow the POSH (professionals of small hands) a leg up on their counterparts.