

# Breaking down ACL reconstruction

Written by Board Certified Orthopedic Surgeons  
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## **What is the ACL?**

The ACL or anterior cruciate ligament is one of four major ligaments in the knee that allows for stabilization. The other three ligaments are the medial collateral ligament (MCL), lateral collateral ligament (LCL), and the posterior cruciate ligament (PCL). The specific function of these four ligaments is to provide stability for the knee in all planes of movement. The specific function of the ACL is to provide stability against anterior or forward translation of the tibia on the femur. This is a vitally important function for any higher level stress to the knee such as running or twisting on the knee.

## **How do injuries to the ACL typically occur?**

Injuries to this ligament typically occur when there is a twisting maneuver and/or a lateral blow to the knee. Examples being a football player who has another player fall on the outside to their knee or

someone who slips on the ice and twists their knee.

## **What are the symptoms of a patient who has injured their ACL?**

Typically there is an acute, traumatic event and there may be the sensation of a “pop” in the knee. The knee will swell significantly, which in turn causes significant pain. If the swelling is allowed to dissipate over several days the pain will subside; however, the knee will be unstable and may “give out.”

## **What are treatment options for an ACL tear?**

Treatment depends on the patient and the physical demands of the patient. If an individual is an athlete or has a physically demanding occupation, the recommendation is generally surgical reconstruction. If the patient has lower daily demands and does not experience

“giving way” of the knee, non-operative strategies can be pursued.

## **How is an ACL reconstructed?**

Once the ACL is torn, the native ligament cannot be directly repaired. Other ligamentous tissue either from another ligament in the injured patient or from a cadaver is harvested to “replace” the damaged ACL. This is done arthroscopically and typically takes approximately 90 minutes of operative time.

## **What is the rehabilitation process following surgery and when can activities be resumed?**

As orthopedic surgeons we work in close contact with a physical therapist following surgery. Initial exercises are focused on regaining motion to the knee; once motion is obtained strengthening exercises can begin. Range of motion is regained anywhere from 2-6 weeks and strength regained from 4-12 weeks post

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operatively, depending on the patient. Competitive athletics is deferred for at least 6-9 months following surgery, which is dictated by the new ligament that has been placed, properly incorporating and obtaining the appropriate blood supply to withstand the stress that is required to compete in athletics. Early return to athletics can lead to rupture of the same ligament and failure of the healing process.

## ***Is a brace required following ACL reconstruction?***

The risk of re-rupturing a healed properly, reconstructed and rehabilitated ACL is as likely as rupturing the ACL initially. Braces have not been shown to prevent a re-rupture in the orthopedic literature.

## ***What are the long-term consequences of an ACL tear?***

This is largely unknown in the medical literature. However, the consequences of

leaving an ACL unrepaired and having an unstable knee will likely lead to early osteoarthritis and joint replacement.

## ***Who should I see?***

You should be seen by a Board Certified Orthopedic Surgeon for evaluation and treatment. Both Orthopedic Surgeons at Yankton Medical Clinic, P.C. are Board Certified and specialize in sports injuries.

***For more information or to schedule an appointment, please call 605-665-1722.***