

Anterior Cruciate Ligament (ACL) Injuries of the Knee

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The anterior cruciate ligament (ACL) is a stabilizing structure in the knee that connects the femur (thigh bone) to the tibia (shin bone). It prevents abnormal anterior motion and shifting forward of the tibia with respect to the femur and provides stability with twisting, turning and pivoting type activities.

This ligament is one of the most commonly injured structures around the knee. People may tear the ACL through a noncontact injury such as changing directions rapidly, landing from a jump, or rapidly decelerating while running. The ACL may also be torn from a contact injury such as being tackled. A torn ACL should be suspected if you injured your knee and felt as though the knee shifted abnormally or feeling or hearing a “pop”. Often the knee swells within a few hours after injury.

Initial treatment often includes ice, a knee immobilizer to limit knee motion and crutches. Sports activities should not be resumed until you are evaluated by a Sports Medicine Specialist or Orthopedic Surgeon. During your evaluation, the doctor will examine your knee to determine if there is abnormal movement, indicating a torn anterior cruciate ligament. Your doctor may obtain x-rays and/or magnetic resonance imaging (MRI) of the knee to help evaluate your injury.

A torn ACL can be treated surgically or nonsurgically. Your activity level, symptoms, age and other associated injured structures in the knee will help determine if your injury should be treated with or without surgery. The ACL rarely heals on its own due to the nature of its structure. Nonsurgical treatment for less active people often includes muscle strengthening exercises and the use of a brace to try to help provide stability. Surgical treatment replaces the damaged ACL with another strong tissue, such as autologous hamstring or patellar tendon. Successful reconstruction of the ACL provides stability to the knee and often allows return to full pivoting, jumping and contact sports and activities. After surgery, there is a rehabilitation period to work on regaining your knee motion, strengthening your leg and allowing the new tissue to heal into the bones in your leg. The recovery period usually lasts between 6 and 12 months.