



Bones & Joints



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Rip Tide: Knee Ligament Tears Are on the Rise

Nothing beats the thrill of slam-dunking a basket, sliding safe into home, or blasting a top-spin return of serve. But as more athletes of all skills and ages pursue thrills in all sorts of sports, they also risk an ever-more-common injury: tears of the anterior cruciate ligament (ACL).

Part of the complex meshwork that cushions the bones in the knee, the ACL helps stabilize the joint and limit its rotation. Once this vital support is damaged, the knee is less sturdy and more susceptible to buckling and further injury.

Deciding on Treatment

If you rip your ACL, the decision about how to treat it will depend on how unstable your knee has become, how the injury has affected other structures in the joint, and how active you want to remain in the future.

You may be able to rebound from the injury without surgery through a physical rehabilitation program that restores your knee's range of motion and strengthens muscles around the knee to compensate for the loss of the ligament. During rehab, you may need to use crutches or wear a brace to reduce stress on the knee. After rehab is over, you may still have to take special care to protect your knee from further injury. This usually means staying away from sports that involve lots of pivoting, such as basketball, softball, soccer, skiing and tennis.

If you love these sports too much to give them up, then reconstructive surgery may be your best option. Surgery may also be called for if your ACL tear makes you unstable in daily activities such as climbing stairs and stepping off curbs, or if the tear is associated with damage to other knee structures.

Repairing the Rip

Surgery cannot reattach the torn ACL. Instead, the ligament is replaced—usually with one or more of your own tendons. Some surgeons use the tendons that connect the kneecap to the tibia, or shin bone; others use tendons that link the muscles in the back of the thigh to those of the lower leg.

During ACL reconstruction, orthopaedists insert an arthroscope, a miniature telescope attached to a tiny camera, into the knee through a small incision. With the help of miniaturized instruments inserted through another minor incision, the surgeon can get a clear view of the inside of the joint and cut away any remaining pieces of ACL. Additional, somewhat larger, incisions are needed to obtain the tendon and attach it to the bones in place of the damaged ACL.

ACL reconstruction is often performed as same-day surgery with no overnight hospital stay required.

Following surgery, you'll need to follow a physical therapy regimen for three to six months in order to reduce swelling and regain strength and mobility. Full recovery may take up to a year.

Who's At Risk?

Anyone who participates in sports is at risk, but as more women get into the game, orthopaedists have noticed that they suffer a disproportionate number of ACL tears. Anatomical differences and hormonal fluxes (estrogen loosens up ligaments) are two possible causes.

Children can also suffer ACL tears. Since young bones are still growing, such injuries in children are not treated surgically. If the injury is severe, braces may be used to stabilize the knee until the bones are more fully formed.

As folks middle aged and older challenge themselves on courts and playing fields, they, too, are suffering more ACL tears. Treatment options for this group are usually the same as for younger people, and post-surgery success rates are at least as good, if not better—in part because people past age 35 may be less active, but also because they tend to be stricter about following rehabilitation regimens. ●

Once the ACL is damaged, the knee is less sturdy.

Anyone who plays sports is at risk.