

Kneed to Know

Five fundamental facts about ACL injuries

By M. Diane McCormick

ACL INJURIES are everywhere. It seems everyone knows someone who has torn the knee's anterior cruciate ligament.

With all that talk around, maybe you think you know everything you need about ACL injury prevention, treatment and recovery. Think again. The field of ACL injury and prevention has some surprises in store. Consider these five things you should know.

1. PREVENTION TAKES PRACTICE

The way an athlete lands, plants a foot and pivots contributes to the risk of ACL injury. Land with kneecaps facing outward and not toward each other, advises Dr. Timothy S. Ackerman of Arlington Orthopedics, PinnacleHealth (www.pinnaclehealth.org), Harrisburg. Turf shoes minimize the risk of getting a foot caught in a surface that, unlike grass, doesn't tear away when a knee pivots, says Dr. Carl Becker of Brain Orthopedic Spine Specialists (www.brainandbones.com), Lancaster.

A physical therapist can spot improper landings and recommend proper techniques, says Casey Dixon Paul, physical therapist with Lancaster

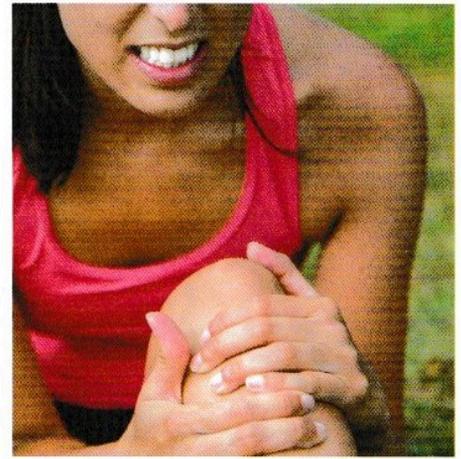
General Health's Columbia Outpatient Center (www.lancastergeneralhealth.org).

What you might now know is that practice makes perfect. Simply telling an athlete what to do doesn't train away a lifelong habit. "In order to be effective, you have to do it at least three times a week, 10 minutes at a time," says Becker. "Most of the time, if you just do it once, after a few weeks you go back to the original way you landed."

2. GIRLS ARE AT HIGHER RISK

Girls experience ACL tears at rates four to eight times those of boys, says Paul. Boys tend to land with hips and knees flexed, putting less stress on the knees, while girls land "flatfooted with legs extended, sending more and more force through the ACL," says Becker.

The female hormone estrogen can also loosen tissue, putting the ACL at higher risk for tears among girls and especially among pregnant women. "The hormones are designed to make things lax so the baby can go through the birth canal, but the side effect of some of that laxity is that it increases the risk of ACL tears," Becker says.



3. MUSCLES MATTER

You can't strengthen the ACL to prevent tears, but you can make sure the quadriceps and hamstrings around the knee are balanced. "When that balance is not there, you're putting more stress on ligaments and tendons and cartilage inside the knee," says Ackerman. "If you're working the wrong muscles or you're not working the other muscles enough, your balance is incorrect." The ACL is the "central pivot

When it came to living an active life, LG Health made sure he could **WALK THE WALK.**

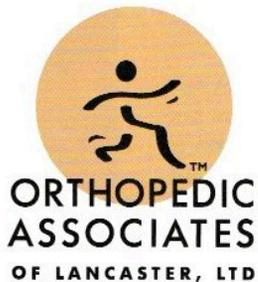
After his knee replacement, Tom got back on track with physical therapy at Lancaster General Health. He liked the fact that our scores for timely recovery and patient satisfaction surpass national averages and, with nine locations to choose from, he got an appointment right away. An experienced therapist, board certified in orthopedics, worked with him one-on-one and set him up on the Alter G Anti-Gravity treadmill to keep the weight off his knee while he strengthened the surrounding muscles. Today Tom's hitting the trail and looking forward to the miles ahead.

Don't stop moving forward.

For more information or to make an appointment, visit www.LGHealth.org/PhysicalTherapy or call 1-888-LGH-INFO (544-4636).

Choose well. Be well.®

Lancaster General Health 



CARING FOR OUR WHOLE COMMUNITY

Visit us online at www.fixbones.com

OAL Lancaster

North Pointe Business Park
170 North Pointe Blvd.
Lancaster, PA 17601

OAL Willow Street

Willow Valley Medical Center
212 Willow Valley Lakes Dr., Ste 201
Willow Street, PA 17584

OAL Mount Joy

Spooky Nook Sports Complex
2913 Spooky Nook Rd., Ste 100
Manheim, PA 17545

The official team physicians of



Physicians • MRI • Physical Therapy • Hand Therapy
Outpatient Surgery • X-Rays • Pain Management

health report

ACL injuries

ligament” that stabilizes the knee, and when some muscles overpower the others, the increased force, or torque, on the ACL causes a tear.

Prevention focuses on correcting muscle imbalances, says Paul.

“Are you firing the muscles when you need to be firing them, or are you firing in a compensatory way?” she asks. “Are you firing other muscles that shouldn’t be working?”

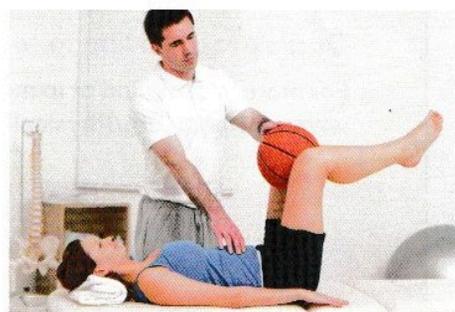
4. SURGERY REQUIRES CHOICES

So, you or a loved one has torn an ACL. You’ll need surgery to return to sports, but it’s not absolutely necessary for everyday activities because the ACL doesn’t control walking and sitting. Surgery is usually recommended for young patients because the knee is still pliable and more prone to reinjury without the stabilizing help of the ACL. Older patients can skip surgery if they don’t plan on returning to the activity that caused the injury, such as skiing, because the stiffness of age holds the knee steady and compensates for the loss of the ACL, says Ackerman.

Patients can choose autografts, replacing torn ACLs with their own tissue, or allografts, typically involving cadaver tissue. Each has risks and benefits. The autograft has less likelihood of infection and rejection, but at the cost of pain and recovery from the additional procedure for obtaining the patient’s own tissue. In the end, full recovery is roughly the same, about four to six months, says Ackerman. “Regardless of which graft you use, your body takes it as its own.”

5. RECOVERY TAKES COMMITMENT

Recovery is “a progression in therapy,” moving gradually from mild to strenuous activity, says Ackerman. Even when they start feeling better, athletes typically aren’t cleared to return to the field or the court for about six months because the body is incorporating the new ACL into its knee.




The
Green Bean
ROASTING COMPANY

100 South Beaver Street
York, PA
717-848-4070

GreenBeanRoasting.com

