

ACL Injury & Reconstruction

A pop, a swollen knee, and a leg that no longer trusts itself. ACL injuries are common in sport — and very fixable with the right plan.

Common in sports · Not everyone needs surgery · Return to sport: 9–12 months

What is it?

The anterior cruciate ligament (ACL) is the central stabiliser of your knee, preventing the shin bone from sliding forward and controlling rotation. It typically tears during cutting, pivoting or awkward landings — often without any contact.

Many patients hear or feel a 'pop', the knee swells within hours, and later gives way during twisting movements.

Causes & risk factors

High-risk moments: sudden change of direction, landing from a jump with the knee straight or collapsing inward, and direct blows in contact sport. Football, kabaddi, basketball, badminton and skiing are frequent culprits.

Risk factors include poor landing mechanics, muscle imbalance, previous ACL injury, and — statistically — female athletes.

Symptoms

At injury: a pop, immediate swelling, difficulty continuing to play. Later: a sense of instability or the knee 'giving way' when turning, difficulty trusting the leg on stairs or uneven ground, and recurrent swelling after activity.

Associated injuries are common — meniscus tears occur in roughly half of ACL injuries and affect treatment decisions.

Diagnosis & investigations

Clinical tests (Lachman, pivot-shift) in experienced hands are highly accurate. MRI confirms the tear and maps associated meniscus, cartilage and other ligament injuries. X-rays exclude fractures.

Have the knee properly assessed even if pain settles — an unstable knee that repeatedly gives way damages the meniscus and cartilage over time.

Non-surgical treatment

Not every ACL tear needs surgery. People with low-demand lifestyles, no instability in daily life and willingness to modify sport can do well with structured rehabilitation focused on hamstring/quadriceps strength and neuromuscular control.

A trial of high-quality rehab is reasonable for many; if the knee still gives way, reconstruction is indicated.

When surgery helps

ACL reconstruction replaces the torn ligament with a graft — commonly hamstring tendons, patellar tendon or quadriceps tendon — performed arthroscopically (keyhole). It is recommended for athletes, people with physically demanding jobs, knees that give way despite rehab, and when repairable meniscus tears coexist.

Success rates are high: most patients regain a stable knee and return to their sport.

Recovery & rehabilitation

Rehab is staged: weeks 0–2 focus on swelling control and regaining full extension; weeks 2–6 on range of motion and early strength; months 2–4 on progressive strengthening; months 4–6 on running; and months 6–9+ on sport-specific drills.

Return to competitive pivoting sport is typically cleared at 9–12 months, guided by strength and hop testing — going back early is the biggest re-tear risk.

Prevention tips

Neuromuscular training programs (like FIFA 11+) cut ACL injury risk by up to half: practise soft, knee-over-toe landings, strengthen hamstrings and hips, and never skip warm-ups. After reconstruction, continued prevention training protects both knees.

Frequently asked questions

Can an ACL tear heal on its own?

A complete tear does not truly heal to normal strength because of poor blood supply. Some partial tears and selected complete tears can become functionally stable with rehab, but the ligament itself doesn't regenerate.

How soon after injury should surgery happen?

Usually after swelling settles and motion returns — commonly 3–6 weeks post-injury. Operating on a stiff, swollen knee increases stiffness risk. Locked knees from meniscus tears may need earlier surgery.

Which graft is best?

Each has trade-offs. Hamstring grafts are versatile with low donor-site pain; patellar tendon offers strong bone-to-bone healing favoured for elite athletes; quadriceps tendon is increasingly popular. Your surgeon will match the graft to your sport, age and anatomy.

Will my knee be normal after reconstruction?

Most patients return to full activity with a stable knee. A well-done reconstruction plus complete rehab gives excellent function, though the knee has a somewhat higher long-term arthritis risk than an never-injured knee — another reason to protect the meniscus.

Can I walk after ACL surgery?

Yes — walking with crutches begins the same day or next, often with full weight as tolerated. Most patients walk unaided by 2–3 weeks.

Questions about your specific case? Book a video, audio or in-clinic consultation with an OssifiDE orthopaedic surgeon: visit ossifide.com/consultation.html, WhatsApp **+91 90760 79000**, or email ossifide@gmail.com.