

Posterolateral corner injury

What you're feeling

The posterolateral corner is a small cluster of ligaments and tendons on the outer back part of your knee. When these structures are injured, the pain usually sits on the outside or back of the knee. The knee can feel unsteady, as though it wants to give way when you twist or change direction.

This injury often happens alongside damage to other ligaments in the same knee, especially the cruciate ligaments deep inside the joint. That is one reason it can be hard to pin down at first: the signs of several injuries overlap, and the outer corner can be missed while attention stays on the more obvious one. Walking on slopes or stairs, pivoting to reach for something, or standing on one leg can all feel unreliable. You may notice the knee feels loose or rotates outwards when you put weight on it.

The discomfort tends to flare after activity, when the knee has been loaded or twisted. Swelling and stiffness can make the knee hard to bend fully, which turns simple tasks like squatting to a low shelf, kneeling in the garden, or getting into a car into careful operations. Long walks or standing for a stretch of time can leave the outer knee aching.

If the injury came from a high-energy event such as a fall, a collision, or a twist with real force, the whole knee may have felt like it popped out of place. In those moments the outer corner structures are often torn along with other ligaments, and the knee can be left feeling broadly unstable rather than sore in just one spot.

Because this corner is easy to miss on first assessment, it is worth telling your surgeon exactly which movements feel unsafe and where the pain sits. That detail helps build a clear picture of what has been injured and what needs treating.

What's actually happening

The posterolateral corner is a small cluster of ligaments and tendons at the outer back edge of your knee. Think of it as a set of guy ropes that anchor the outer side of the joint and stop it from bowing outwards or twisting too far. The main ligament in this group runs from the end of the thigh bone down to the top of the smaller bone on the outside of your lower leg. Its job is to hold the knee steady when weight pushes through the outer side, and to limit the twisting that turns your lower leg outwards.

When this corner is injured, those guy ropes slacken or tear. The knee can then slide or rotate in ways it was never designed to, which is the looseness and outward rotation you may have noticed. Because the corner also helps control twisting while you bend the knee, slopes, stairs and pivoting movements feel unreliable.

This injury rarely travels alone. It often happens at the same time as damage to one of the cruciate ligaments deep inside the joint. When that happens, the two problems feed each other: a rebuilt cruciate ligament can be overloaded and fail if the outer corner is still loose. That is why missing this corner on first assessment matters, and why your surgeon will check for it carefully.

The injury is often described in grades. A mild grade means the ligaments are stretched but still holding. A severe grade, sometimes called a complete tear, means the corner structures are fully torn and the knee is clearly unstable. Severe grades, especially when other ligaments are torn too, are the ones that tend to need surgery.

One more thing worth knowing: a nerve that supplies feeling and movement to the lower leg runs right past this corner, around the top of that outer bone. It is one reason this injury, and any surgery on it, needs careful planning.

What we can do about it

Dr Kieran Hirpara, an orthopaedic surgeon at Mater Private Hospital Rockhampton, matches the treatment to your specific injury. Patients are generally referred to our clinic by their GP; if a physiotherapist has suggested you see us, you will still need a referral from your GP in order to be eligible for the Medicare rebate. At that first visit we take a history, examine your knee, and arrange imaging where it is needed. A careful ligament examination together with an MRI scan is the standard way to work out what has been torn. Even then, this corner of the knee is easy to miss on scans, so we also check for it directly during keyhole surgery if we have any doubt.

For milder injuries where the ligaments are stretched rather than fully torn, we usually start with non-operative care. That means changing how you load the knee, and a course of physiotherapy aimed at building the strength around your hip and thigh and retraining the balance and control that keep the knee steady on slopes, stairs and pivots. We give this a fair trial before talking about anything further.

For injuries where the corner structures are fully torn, especially when other ligaments in the same knee are torn too, we will usually recommend surgery without a waiting period. The operation rebuilds the damaged ligaments at the outer back of the knee, and when a cruciate ligament is torn as well, both are reconstructed in the one procedure. Rebuilding rather than stitching the torn corner tends to hold up better in fresh injuries. When the problem has been there a long time and the knee has gradually loosened, surgery can still help: straightening the leg's alignment and rebuilding the ligaments together can restore enough stability for daily activities and low level sport. Because this corner sits close to a nerve that supplies feeling and movement to the lower leg, we plan the operation carefully around it.

Whether we suggest operating straight away or after a trial of physiotherapy depends on which structures are torn, how loose your knee is, and what you need it to do. We will talk through the options with you and decide together.

What to expect

The outlook depends on how badly the corner is torn and whether other ligaments went with it. A mild stretch, where the ligaments are still holding, often settles with physiotherapy and a change in how you load the knee. A complete tear, especially one that came from a fall, a collision or a twist with real force, does not usually settle on its own. Left alone, the looseness tends to stay, and it can wear down the cartilage inside the joint over time.

Timing matters. When surgery on this corner is delayed more than 4 weeks from the injury, outcomes are less predictable than when it is done early. The same pattern shows up in the knee more broadly: the longer the gap between injury and rebuilding the ligaments, the more likely the joint surfaces have taken a hit. That is one reason your surgeon will want a clear diagnosis early rather than waiting to see how things unfold.

When the corner is rebuilt along with any torn cruciate ligaments, most people regain stability. In one group of patients who had both rebuilt together, 80% reported good results and a knee that held steady in daily life. External rotation, the twisting that turns your lower leg outwards, is restored in the majority of patients. Straightening against outward bowing is restored in most but not all knees. Results tend to be better when the ligaments are rebuilt soon after the injury rather than years later, and people who have had knee ligament surgery before often report a lower quality of life than those who have not.

Be realistic about work and activity. In a group of patients with combined ligament tears, 10% overall had to change jobs because of the knee. For labourers, that figure was 25%. Many people return to daily activities and low level sport, but a knee that has had several ligaments rebuilt may not feel identical to the one you had before the injury. Your surgeon will talk through what a realistic recovery looks like for your knee, your job and the activities you want back.

When to see someone

See your GP promptly after any knee injury where the knee felt like it popped out of place, or where the outer back of the knee is painful and the knee feels loose or gives way. This corner of the knee is easy to miss, and scans do not always pick it up, so it is worth being checked early rather than waiting. Ask for a specialist review if your knee still feels unsteady on slopes, stairs or pivoting movements after a few weeks, or if a previous cruciate ligament reconstruction has started to feel loose. Timing matters here: surgery on this corner works best within the first 4 weeks from the injury, and results are less predictable when it is delayed beyond that.