CQ HAND + UPPER LIMB
SPECIALIST ORTHOPAEDIC SURGEON

PATIENT INFORMATION

Multiligament knee injury

What you're feeling

A multiligament knee injury means more than one of the strong bands holding your knee together has been torn. This usually happens after a major twist, fall, or impact, and the knee often gives way completely when it happens.

The pain is usually felt deep in the centre of the knee, and often along the inner side, the outer back corner, or both. Your knee will likely feel loose or unstable, as if it might slide or buckle when you put weight on it. Swelling builds quickly and can be severe. Walking is hard, and your knee may not feel safe to trust on stairs or uneven ground.

Straightening your knee fully can be difficult and painful. Bending down to pick things up, kneeling, or squatting can flare the pain. Standing up from a low chair, getting into a car, or stepping off a kerb may all feel shaky. The knee often feels worse after activity and can ache at night, especially in the first days and weeks.

Because this injury often comes with other injuries from the same accident, you may also be dealing with pain or problems elsewhere, such as your head, chest, or belly. Tendons around the kneecap and the cushioning pads inside the joint can also be damaged, which adds to the pain and stiffness. In some cases, the nerves or blood vessels near the knee are affected too, which your surgical team will check carefully and treat first if needed.

Every knee injury is a bit different. Which ligaments are torn, how much other damage there is, and how the injury happened all shape what you feel and what treatment will suit you.

What's actually happening

Your knee is held together by four main ligaments, which are strong bands that connect bone to bone. One sits at the front, one at the back, one on the inner side, and one group at the outer back corner. A multiligament injury means at least two of these have been torn. This usually happens when the knee is forced out of place during a major accident, like a car crash or a hard fall, and then slides back on its own or is put back by paramedics.

When the knee shifts out of place, more than the ligaments can be hurt. The cushioning pads inside the joint can tear, and the joint surface itself can be bruised or damaged. The tendons around the kneecap can also be

CQ HAND + UPPER LIMB
Dr Kieran Hirpara — Specialist Orthopaedic Surgeon
Suite 2, Level 1, Mater Private Hospital Rockhampton, 31 Ward Street, The Range, QLD 4700
Phone 07 4863 6556 · office@cqupperlimb.com.au · cqupperlimb.com.au

strained. This is why the pain and stiffness you feel come from several places in the same knee, not just one sore spot.

Two structures near the knee need special care. A large artery runs right behind the joint, held snugly in place, so it can be stretched or torn when the knee shifts. The nerve that runs down the outer side of the leg, near the top of the smaller lower-leg bone, can also be stretched. If that nerve is affected, lifting the front of your foot up can become weak or floppy. This is why your surgical team checks the pulse and nerve function in your leg carefully and early.

The swelling and giving way you feel are the direct result of these torn bands no longer holding the joint steady. Without them, the knee can slide forwards, backwards, or sideways when you put weight on it. That sliding also strains the cushioning pads and joint surface, which adds to the pain. The goal of treatment is to restore that stability so the knee can be trusted again.

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 your first visit we take a history, examine your knee, and arrange imaging where needed. Plain X-rays come first. An MRI scan gives a detailed picture of the torn ligaments, the cushioning pads, and the joint surface. Stress X-rays, taken while gentle pressure is applied to the knee, show how loose the joint is and help us plan.

Some knees can be managed without surgery. This may suit you if other health problems make a long operation unsafe, or if your knee stays stable with support. Treatment starts with a brace to hold the knee still, then physiotherapy to rebuild strength and movement. For some patterns of injury, such as a torn front ligament together with a stretched inner ligament, bracing and physiotherapy alone can work well. In one group treated this way, 68% of people returned to their previous activity level. Surgery is usually advised instead when the knee keeps sliding out of place, when open wounds or blood vessel damage are involved, or when the growth plates are still open in a child.

When surgery is needed, the torn ligaments are rebuilt so the knee can hold steady again. Because several ligaments are torn at once, the operation is bigger than a single-ligament repair, and it is often done in stages with the knee protected between them. We will talk through the plan with you, including which tissue is used for the new ligaments and what that means for your recovery. The choice is a shared one, based on your injury, your health, and what you want your knee to do.

Rehabilitation is a major part of the result, whatever the treatment. After surgery the knee is often braced straight at first, then bent gradually. In one common plan, you stay off the leg for 6 weeks, bend to 70 degrees from weeks 2 through 6, and move freely after that. Jogging waits at least 3 months. Most complex reconstructions take 9 to 12 months to recover, though some people return to heavy work or sport at 6 months.

CQ HAND + UPPER LIMB
Dr Kieran Hirpara — Specialist Orthopaedic Surgeon
Suite 2, Level 1, Mater Private Hospital Rockhampton, 31 Ward Street, The Range, QLD 4700
Phone 07 4863 6556 · office@cqupperlimb.com.au · cqupperlimb.com.au

What to expect

A multiligament knee injury is a serious one, and recovery takes time. Most people who have surgery to rebuild the torn ligaments regain a steady, trustworthy knee. Many are satisfied with the result and return to their usual activities. Some young athletes return to sport at some level, though not everyone gets back to the exact level they played at before the injury.

Recovery is usually measured in months rather than weeks. The knee needs time to heal, then months of physiotherapy to rebuild strength and confidence. How you fare depends on more than the knee itself. Injuries elsewhere from the same accident, such as your head, chest, or belly, can slow things down and keep you in hospital longer. Your age matters too. People over 30 tend to report somewhat lower knee scores in the years after surgery than younger people. Other health factors, including your weight, can also affect the risk of complications after surgery.

Surgery carries more risk than a routine single-ligament operation. In the first 30 days afterwards, the chance of a complication, whether minor or serious, is higher than after a standard keyhole front-ligament reconstruction. Problems are uncommon during the operation itself but more likely in the early days and weeks afterwards. Your surgical team will watch for these and treat them promptly if they appear.

Without treatment, an unstable knee tends to keep giving way, which can strain the cushioning pads and joint surface over time. Early surgery generally leads to better function than waiting or leaving the knee alone. Knees left untreated also tend to fare worse in the long run than those that are rebuilt.

Set realistic goals. Most people regain a stable knee they can rely on for daily life, work, and many activities. Full return to high-level sport is possible for some but not guaranteed for everyone. Your surgeon will talk with you about what your knee can realistically do after treatment, based on your injury, your age, and your health.

When to see someone

This injury is an emergency when it happens. Go to an emergency department if your knee has been forced out of place in a fall, crash, or other major impact, or if it looks badly out of shape. The same applies if your leg feels cold, pale, or numb, if there is no pulse at the ankle, or if you cannot lift the front of your foot up. These can mean the artery or nerve behind the knee is damaged, and that needs checking straight away.

Ask for a specialist review if the knee stays loose or keeps giving way after the first weeks, if it will not straighten fully, or if swelling and pain are not settling with rest and a brace. Severe injuries elsewhere from the same accident can change how and when the knee is treated, so tell your team about any head, chest, or belly injuries too.

CQ HAND + UPPER LIMB
Dr Kieran Hirpara — Specialist Orthopaedic Surgeon
Suite 2, Level 1, Mater Private Hospital Rockhampton, 31 Ward Street, The Range, QLD 4700
Phone 07 4863 6556 · office@cqupperlimb.com.au · cqupperlimb.com.au