

Osteochondral lesion of the talus

What you're feeling

An osteochondral lesion of the talus is a small patch of damaged cartilage and bone on the surface of the talus, the bone that sits under your ankle joint. The damage can come from a single ankle sprain, from repeated sprains over time, or from a combination of causes that are not fully understood. Some people with this damage feel nothing at all. Others notice a deep ache in the ankle that keeps coming back.

The pain is usually felt inside the ankle joint, and it tends to be worse with activity. It may ease once you stop and rest. Your ankle might also swell and feel tender around the joint. If you have sprained the same ankle before, that history often fits with what is going on now.

Day to day, the ache can make walking, standing for long stretches, and pushing off the foot harder than they should be. Uneven ground, stairs, and sport that loads the ankle can all stir things up. Some people find the ankle feels stiff or sore when they get moving again after sitting or resting.

If any of this sounds familiar, it is worth having the ankle looked at properly. A scan can show the location, size, and severity of the damaged area, because small patches of damage may not show up on a plain X-ray.

What's actually happening

The talus is the bone that sits directly under your ankle joint. Its top surface is covered with a smooth, slippery layer of cartilage, a tough padding that lets the two bones glide over each other without friction. Think of it as the tread on a tyre: strong, slightly springy, and built to take load every time you stand or walk.

With this condition, a small patch of that cartilage, and sometimes the bone beneath it, has been bruised, cracked, or has come loose. The force of the injury presses the joint surfaces together hard enough to damage the surface layer. Sometimes there is no single injury at all: the patch can develop from repeated small knocks, from problems with the blood supply to that spot of bone, or from causes that are not fully understood.

The damaged patch itself cannot feel pain, because cartilage has no nerves. The ache you feel comes from the bone underneath. When you walk, fluid is squeezed through tiny cracks in that bone under high pressure, which irritates the richly supplied bone surface and produces that deep, nagging pain. Over time, the pressure can also

cause a small fluid-filled cavity, a cyst, to form in the bone. If the damaged patch breaks free and floats loose in the joint, it can catch or cause swelling and clicking.

Small patches of damage sometimes settle on their own with rest and time. Larger ones, or ones where the patch has come loose, tend to keep causing symptoms and can gradually wear the joint further. That is why the size, depth, and position of the patch, which a scan can show, shape what happens next.

What we can do about it

Dr Kieran Hirpara, a foot and ankle surgeon at Mater Private Hospital Rockhampton, starts with the least invasive options that suit your condition. 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 ankle, and arrange scans where they are needed. A CT scan, which builds a detailed picture of bone, can show exactly where the damaged patch sits at the front, middle, or back of the talus. An MRI scan shows cartilage and bone in detail and helps us judge the size and depth of the patch. These details shape what we recommend next.

For small patches that have not come loose, we usually start with non-operative care. That means rest, changing how much you load the ankle, and physiotherapy. Physiotherapy aims to settle the ache, build the muscles that support your ankle, and steady the joint on uneven ground. Give this a fair trial before thinking about surgery. Non-operative treatment works for about 45% of people with this condition. If your patch is in its early stages, this is usually the right place to start. Some deeper patches can still be treated this way first, but they often need surgery if symptoms keep coming back.

If the patch is larger, has come loose, or non-operative care has not given you enough relief, we will talk you through surgery. The aim is to reach the damaged area, clear away loose or unhealthy tissue, and encourage new tissue to grow in the gap. For small to medium patches this is usually done through keyhole surgery, called arthroscopy, using a thin camera and small instruments through tiny cuts. For larger patches, surgery may involve replacing the damaged surface with healthy cartilage and bone, either from another spot in your own knee or from donor tissue. If your ankle ligaments have been stretched by repeated sprains, we may tighten them at the same time to protect the repaired surface and the long-term health of the joint. The specific operation depends on the size, depth, and position of your patch, and we will explain the one that suits you before you decide anything together.

What to expect

There is no single course this condition follows. Small patches of damage sometimes settle on their own with rest and time. Larger patches, or ones where the damaged piece has come loose, tend to keep causing symptoms and can gradually wear the joint further. That is why the size, depth, and position of your patch shape what happens next.

If non-operative care works for you, the outlook is steady. Patches that settle with an initial period of rest and changed activity are linked with minimal symptoms in the long term, a low rate of the problem coming back,

and no meaningful progression of wear-and-tear arthritis in the ankle. If it does not settle, most people with symptoms that persist or a loose patch need surgery.

Surgery aims to relieve pain and get the ankle working again. Most reasonable operations for this condition lead to similar and satisfactory results, and the choice between them depends mainly on your patch rather than on one technique being better than another. For small patches treated with keyhole surgery, good or excellent outcomes are reported in 89% of people under 50 whose patch is 1.5 cm² or smaller. Results are similar whether the damage came from an injury or not. Some operations encourage your body to grow new repair tissue in the gap, and this tissue growth can be seen on detailed scans in most cases. Other options replace the damaged surface with healthy cartilage and bone, and these can be used safely if an earlier operation has not worked.

It is worth knowing what surgery cannot always fix. After keyhole microfracture, where tiny holes are made in the bone to encourage repair, the bone beneath the surface may not fully return to its normal height over the longer term, and small fluid-filled cavities in the bone can sometimes worsen. Some people continue to notice symptoms despite treatment.

If your ankle ligaments have been stretched by repeated sprains, having them tightened at the same time as the patch is treated may protect the repaired surface and slow further cartilage damage. Your surgeon will talk through the option that fits your patch and your goals.

When to see someone

See your GP if you have sprained the same ankle more than once, or if a deep ache inside the ankle keeps coming back after activity and eases with rest. Ask for a specialist review if the ankle swells and stays tender, if it feels unsteady or gives way on uneven ground, or if it catches, clicks, or locks. These can mean a loose piece of damaged cartilage in the joint. Also ask about your ligaments: repeated sprains can stretch them, and that looseness can keep damaging the joint surface. It is worth acting early, because a stretched ligament and a damaged patch can feed each other.