

Ankle osteoarthritis

What you're feeling

Ankle arthritis usually starts after an old injury. A bad sprain, a broken ankle, or a dislocation can damage the smooth surface inside the joint. Years later, that damage turns into wear-and-tear arthritis. Sports injuries, especially soccer injuries, are a common starting point. So are ankle fractures, where arthritis can show up on X-rays many years later.

The pain sits deep in the ankle joint, often at the front or on the outer side. It gets worse when you walk, stand for long stretches, or push off that foot. Swelling and bruising around the bony bump on the outside of your ankle are common after a sprain, and the same area can stay tender as arthritis develops. Some people feel a catching or locking sensation, which happens when a loose fragment of cartilage moves around inside the joint.

Stiffness tends to be worst on waking or after sitting still. The first few steps in the morning can be slow and careful. After activity, the ankle may ache well into the evening and throb at night. Walking on uneven ground, such as gravel or a sloping lawn, takes more effort because the joint no longer moves smoothly.

Everyday tasks feel different. You might favour the good leg on stairs, avoid squatting to pick things up, or shorten your walk to the letterbox. Standing at the kitchen bench or waiting in a queue can become uncomfortable. Because the ankle does less of the work, your other muscles compensate, so walking can feel tiring even over short distances.

If your ankle gives way or feels unstable, that points back to the ligaments injured long ago. Repeated sprains over the years can speed up the wear inside the joint. Numbness across the top of the foot can follow the same kind of twisting injury, when a small nerve near the ankle is stretched.

Tell your surgeon where it hurts, what time of day it's worst, and which activities you've stopped. That picture helps guide what happens next.

What's actually happening

Your ankle is a deep socket formed by three bones: the shin bone, and the two thin bones either side of it, the inner and outer ankle knobs. A small bone called the talus sits inside this socket like a peg in a mortise joint in carpentry. The whole thing works because the parts fit snugly and glide together.

Covering every surface is a smooth, slippery layer of cartilage. Think of it as the joint's shock absorber and gasket combined: it cushions the load and lets the surfaces slide without friction. When an old injury, repeated sprains or a badly healed fracture have damaged that layer, the cushion thins and wears away. Bone then grinds on bone, and the joint responds with swelling, bony spurs at the front of the ankle, and stiffness. That grinding is what you feel as pain across the front of the ankle, especially those first steps after rest.

The ligaments matter too. These are strong straps that hold the bones in line. The strap on the inner side, called the deltoid ligament, is the main stabiliser when you stand. The straps on the outer side stop the ankle rolling. When those outer straps are stretched or torn from old sprains, the talus can shift and rock inside the socket as you walk, loading one edge of the joint far more than the other. That uneven load wears out the cartilage faster, which is why most ankle arthritis traces back to an injury rather than simple ageing.

Because the ankle can no longer move smoothly, your body compensates. You may turn your foot outward as you walk to make up for lost motion, and your other muscles work harder to control each step. That extra effort is why walking feels tiring, and why the joints further along your foot do not pick up the slack.

What we can do about it

Dr Kieran Hirpara, an orthopaedic 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 X-rays or scans where they are needed. Weight-bearing X-rays, taken while you stand, show how much joint space is left and how the ankle lines up. Sometimes an MRI or CT scan helps us see the cartilage, tendons and bone in more detail.

For most people with a long-standing problem like this, we try non-operative care first. Simple changes go a long way: a walking stick takes some of the load off the joint, and losing excess weight reduces the force through your ankle with every step. Physiotherapy aims to keep the ankle moving, settle flare-ups, and build the strength in the muscles that support and steady the joint. We usually ask you to give these measures a fair trial over several months before we talk about anything further.

Pain relief and anti-inflammatory medicine, taken as your GP directs, help with painful flare-ups. Injections into the ankle joint are another option we can discuss. Hyaluronic acid injections, given at 3-weekly intervals, can improve pain, balance and day-to-day function, and reduce the need for anti-inflammatory tablets, with the benefit measured at 6 months after injection. Platelet-rich plasma, made from a sample of your own blood, has shown improvement in pain and function out to 24 weeks in some ankles, particularly younger patients with early-stage disease. Cortisone injections are not part of the routine pathway we follow for this condition, so we will tell you plainly if we do not think they will help you.

Surgery comes into the conversation when these measures have not given you enough relief and the arthritis is limiting what you can do. What we recommend depends on the stage of the arthritis and how your ankle lines up. In earlier stages, joint-preserving operations can realign the ankle, remove bony spurs at the front, or take pressure off the joint so it can recover some function. In advanced stages, the two main operations are ankle fusion, where the worn surfaces are joined so they no longer grind, and ankle replacement, where the worn

surfaces are resurfaced. Each has its own page with more detail. We will talk through which option fits your ankle, your age and your goals, and decide together.

What to expect

Ankle arthritis from an old injury does not usually settle on its own. The wear inside the joint builds slowly over years, and the pain tends to persist or gradually worsen rather than come and go. Some people have quieter stretches between flare-ups, but the underlying damage stays. Left alone, stiffness often increases, walking gets harder, and the joints further along your foot can start to wear as they take up the slack.

The good news is that much can be done at every stage. Early on, simple measures such as a walking stick, weight loss and physiotherapy can settle flare-ups and keep you moving. If your ankle lines up unevenly, an operation to realign it can shift load back onto the healthier part of the joint. That kind of joint-preserving surgery can delay the need for bigger operations, sometimes for years, in younger patients.

Once the arthritis is advanced, the two main options are ankle fusion and ankle replacement. Both can produce satisfactory function when they are matched to the right patient. Walking generally improves after either operation. Some people walk with a more normal pattern after a replacement, and find uneven ground easier, while others do just as well with a fusion. A fusion removes motion from the ankle itself, which puts more work on nearby foot joints, and those joints can show further wear over time. A replacement keeps some motion but carries its own risks: in one large comparison, reoperations and major complications were more frequent after replacement than after fusion, and results can fade over longer timeframes.

Whichever path you take, recovery is gradual. Expect steady improvement over weeks to months rather than an overnight fix, and set your goals around what matters to you, whether that is walking the dog or returning to work. Careful selection matters: the right operation for your ankle, your age and your aims gives you the best chance of a lasting result. Your surgeon will talk through the options with you and help you weigh them up.

When to see someone

See your GP if a twisted ankle is still painful and swollen after six weeks, or if you cannot put weight on it at all soon after the injury. Those signs mean an X-ray is needed to check for a broken bone. Ask for a specialist review if pain keeps coming back, if the ankle feels loose or keeps giving way, or if it locks or catches when you move it. Numbness across the top of the foot after a twisting injury is also worth having checked. If you already know you have ankle arthritis and the pain is stopping you sleeping, working or walking to the letterbox, ask your GP about a referral. Ankle arthritis builds slowly, so the earlier it is assessed, the more options you have.