

Achilles tendon rupture

What you're feeling

A ruptured Achilles tendon usually announces itself. Most people describe a sudden snap in the back of the ankle, like being kicked or shot in the leg, even though nothing touched them. It typically happens during a push-off movement, such as lunging, jumping or sprinting, when the calf muscle is working hard while the tendon is stretching.

The rupture most often happens in a specific spot on the tendon, about 5 to 6 cm above where it attaches to the heel bone. This area has a poorer blood supply than the rest of the tendon, which helps explain why it gives way there. Some people notice pain or stiffness in that same spot in the days or weeks beforehand, but many feel nothing unusual until the tendon goes.

Afterwards, you may notice:

- A gap you can feel in the tendon, a soft spot where the cord used to be
- Less strength when pushing off that foot, so you may find yourself using your toes to compensate
- The affected ankle resting lower or floppier than the other one

Walking, climbing stairs and standing up from a chair all rely on the calf and Achilles working together, so these become noticeably harder. Pushing a shopping trolley, getting out of the car or stepping off a kerb can catch you out.

If some time has passed since the injury, the picture can be less obvious. The ankle may simply feel weak and unstable rather than painful, which is one reason a rupture is missed in up to 25% of cases. Your surgeon will usually be able to tell what has happened from your story and a physical examination, and scans are only needed in some cases to confirm the injury or plan treatment.

What's actually happening

The Achilles tendon is the thick cord you can feel at the back of your ankle. It is the largest and strongest tendon in your body, about 12 to 15 cm long. It joins the two muscles of your calf to your heel bone, and every time those muscles squeeze, the tendon pulls so you can push off the ground.

Think of it as a rope that has been asked to do a very big job. Because it works so hard, some parts of it get a poorer blood supply than others. The spot about 5 to 6 cm above the heel bone gets the least, and that is exactly where most ruptures happen. As people get older, the blood supply to the tendon fades further and the rope itself becomes stiffer and less springy. Small strains build up faster than the tendon can repair them, until one big push-off is more than it can take. That is the snap you felt.

When the tendon tears, the two ends pull apart and the cord that used to connect your calf to your heel is no longer joined. That is why pushing off feels weak, why you may use your toes to make up for it, and why the ankle sits lower or floppier than the other side. Your body will try to bridge the gap on its own, but the tendon ends need to be held close together while that happens, which is where treatment comes in.

It is worth knowing that recovery is a long game. The calf and ankle keep adapting for years after the injury, and most people are still not back to how the other leg feels two years on, whichever treatment they have. The tendon also tends to end up slightly longer than before, which changes how the ankle works. Knowing this from the start helps you judge your progress against a realistic picture rather than expecting too much too soon.

What we can do about it

For a fresh rupture the diagnosis is usually clear from the examination itself, so imaging is often not needed unless we want to check for other injuries or plan an operation.

Because this is a structural injury, not a slow wearing-out problem, we may recommend treatment straight away rather than starting with a trial of exercises. There are two main paths, and we will talk through both with you. One is non-operative care: the tendon ends are held close together while your body heals them, usually in a boot or cast, and you can put weight on the leg early within that programme. The other is surgery, where the torn ends are stitched back together, sometimes with a supporting band of material to reinforce the repair. Both paths aim for the same thing, a tendon that lets you push off again, and for many people the results at twelve months are similar whichever route they take.

The choice is a shared one, and it depends on you. Your age, your general health, how active you want to be, and how quickly the tendon ends can be brought together all shape the advice we give. Surgery lowers the chance of the tendon tearing again compared with treating it without an operation, though that needs weighing against the risks that come with any operation. If the rupture happened some time ago, or if the skin over the tendon is a problem, we may suggest other steps to make repair possible and protect the healing skin. Whichever way we go, a structured rehabilitation programme with a physiotherapist is part of the plan, because the calf needs rebuilding after the tendon has healed.

What to expect

Recovery from a ruptured Achilles tendon takes time. Most people need at least 12 months to get back full function, whichever treatment they have. Elite soccer players usually take 1 year to reach peak match participation again. The calf and ankle keep adapting for years, and most people are still not quite back to how the other leg feels two years on.

Some changes can stay with you. The calf muscle may remain weaker and tire sooner, and this can still show up 7 years after the injury. The healed tendon is also less springy than it was before, and it tends to end up slightly longer, which changes how your ankle pushes off. Your body often makes up for this without you noticing, with other muscles and joints along the leg picking up some of the work.

Treatment choices shape the risks as well as the outlook. Surgery lowers the chance of the tendon tearing again compared with treating it without an operation, and repairs done with keyhole techniques have shown no repeat tears after at least 24 months. The trade-off is that surgery carries its own risks, mainly wound problems and infection around the back of the ankle. Treating the rupture without surgery avoids those wound risks but has a higher chance of the tendon tearing again. For many people, results at twelve months are similar whichever path they take, as long as the rehabilitation programme is followed properly.

Timing matters too. Having surgery within 48 hours of the injury is linked with fewer problems afterwards than waiting past 72 hours. Even if more than 2 weeks have passed since the rupture, repair can still work well.

One thing worth knowing: a blood clot in the leg during the period in the boot or cast can affect how the ankle works 3 years later, so tell your surgeon promptly about new calf pain or swelling.

When to see someone

A ruptured Achilles tendon needs prompt attention, and the timing matters. Ask for a specialist review within days of the injury, because surgery done within 48 hours is linked with fewer problems afterwards than waiting past 72 hours. Go to an emergency department if you felt the sudden snap described earlier and cannot push off that foot at all, or if the calf becomes hot, red, swollen and painful, which can signal a serious infection needing same-day care. New calf pain or swelling while you are in a boot or cast also needs urgent review, because a blood clot can affect how the ankle works later. See your GP for a referral if you notice a gap in the tendon, weakness pushing off, or an ankle that rests lower than the other side, even if the injury happened weeks ago.