

Achilles Tendon Repair

Image courtesy of Wright Medical



What it is

The Achilles tendon is a large cable-like band of fibrous tissue in the back of the ankle connecting the calf muscles to the heel bone. It's the largest tendon in the human body. When the calf muscles contract, the Achilles tendon tightens and pulls on your heel bone. This allows you to point your foot down and stand on tiptoe. This motion is vital to activities like walking, running and jumping.

A complete tear through the tendon, which usually occurs a few inches above the heel bone, is called an Achilles tendon rupture. This causes sudden pain behind the ankle; people who suffer the injury may hear a "pop" or "snap" and feel as though they've been kicked in the heel.

Why it's a problem

The Achilles tendon can grow weak and thin with age and lack of use, becoming prone to injury or rupture. Certain illnesses (like arthritis and diabetes) and medications (including some antibiotics) can also increase the risk of rupture.

Most ruptures occur during recreational sports that require bursts of jumping, pivoting and running (e.g. tennis, racquetball, basketball). Other causes include falling from a significant height, or suddenly tripping or stumbling.

An Achilles tendon rupture can be treated either in a cast for several months or with surgery depending on the location of the rupture and the position of the tendon ends. After discussing options with your surgeon, you may decide to proceed with surgical treatment.

Surgical treatment

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| Outpatient or hospital stay: | Outpatient (home same day) |
| Type of anaesthesia: | May be regional or general, or a combination |
| Length of surgery and recovery: | Depends on nature of injury |

Recovery

Following treatment (both surgical and non-surgical):

- Your leg will be in a cast or special braces for several weeks.
- If you have a cast, keep your cast dry! If the cast gets wet, the skin underneath stays damp and can become mouldy and smelly. To keep your cast dry in the shower, enclose it in a plastic bag, or buy a special cast protector. If the cast and the underlying dressing get wet, contact your surgeon's office or go to your nearest emergency department to get your cast checked.
- You will be instructed on caring for your cast or brace, and if and how much weight you can bear on the foot.
- Watch for complications after surgery. Alert your surgeon or visit an emergency room if you experience pain that does not subside with prescribed medication, swelling that worsens (or the cast becomes too tight and you notice loss of colour in your toes), and/or have a fever higher than 38°C or 101°F.



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Both surgical and non-surgical treatments traditionally require an initial period of about 6 weeks of casting or special braces. The cast may be changed and foot repositioned every 2 to 4 weeks to slowly stretch the tendon back to its normal length. Bracing may be combined with early movement (1 to 3 weeks) to improve overall strength and flexibility. At approximately 6 weeks, you may be able to begin bearing some weight on the foot. A heel-lift device and regular physiotherapy are part of the treatment. It takes at least 4 to 6 months before it is safe to return to activities such as running.

Some studies have shown that patients do well and heal faster with more rapid mobilization. If a solid repair is attainable, patients may not be casted at all and may be allowed to begin motion immediately after surgery. These patients will use a removable boot when walking for about 3 weeks. Your surgeon will discuss the details of your particular situation with you.

For more information: The Canadian Orthopaedic Foundation provides a free booklet, *Foot & Ankle Surgery – Planning For Your Best Results*, which outlines general preparations, complications monitoring, a diary of progress and more. Visit www.movepainfree.org to download your free copy.

