

Patient information from BMJ

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Heel pain (plantar fasciitis)

Heel pain can be uncomfortable and make it hard to walk. But it usually gets better on its own with time. Trying certain exercises and treatments might help relieve the pain until it clears up on its own.

We've brought together the best and most up-to-date research about heel pain to see what treatments work. You can use our information to talk to your doctor and decide which treatments are best for you.

What happens?

This information is about a type of heel pain that gives you soreness or tenderness on the bottom of your heel and the sole of your foot. Doctors call this **plantar fasciitis**.

The **plantar fascia** is a band of tissue that stretches from your heel to the ball of your foot. A pad of fat in your heel, over the plantar fascia, helps absorb the shock when you walk.

Most heel pain of this type happens in people over 40 years old. This might be because the plantar fascia doesn't stretch so well as people get older.

The fat pad on the heel may also get thinner as you age and not absorb so much of the shock as you walk. You might also get a spur of bone growing where the plantar fascia joins your heel bone. This can make your heel painful.

But doctors aren't really sure why some people get this pain. Some doctors think that heel pain can be caused by standing for long periods on hard surfaces, or that it might be more common in people who are overweight or who do a lot of running. But no one really knows what causes it.

What are the symptoms?

Heel pain can feel sharp, like a knife sticking in the bottom of your foot.

The pain is usually worst first thing in the morning when you take the first few steps after getting up, and when you first stand up after resting. After standing for a while the pain may become more like a dull ache.

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This type of heel pain causes soreness and tenderness only on the bottom of your foot. You don't usually feel a pain on the back of your heel. The pain often spreads from the centre of your heel and continues along the sole of your foot. The inside of the arch of your foot may ache.

Heel pain may just be an irritation that you notice when you first stand up. Or the pain can be bad enough to stop you walking.

What treatments work?

The pain in your heel should go away by itself with time, but it might take several months. But if it is very bad or is taking a long time to get better you can talk with your doctor about treatment.

In the meantime there are many things you or your doctor can try that might help.

Things to try first

Rest

It might sound obvious, but the first thing to try is to rest your foot as much as possible. Many people find that this helps reduce their pain.

If you want to stay active while resting your foot you could try sport or activities that don't involve putting too much weight on your foot, such as cycling and swimming.

Supports for your feet

There are several types of support that can help reduce heel pain. These range from simple **insoles** and **heel pads** that you can buy from a pharmacy to custom-made shoes. But there isn't much good research on how well they work. You may have to try several methods and see which works for you.

Another method of supporting the foot involves **taping the foot** to give support to the arch. The idea is to strap up the foot, a little like bandaging, to give support and reduce how much the foot moves and flattens when walking. Your doctor will be able to tape your foot properly and show you how to do it yourself.

Stretching the plantar fascia might reduce heel pain. There are various ways to stretch this part of the foot. Your doctor or physiotherapist can show you how to do it.

Some people try over-the-counter anti-inflammatory **painkillers** such as ibuprofen for heel pain. But research suggests they don't have much effect.

Ice packs, used for up to 20 minutes at a time, can help reduce pain in the short term. Ice should always be wrapped in a thin cloth before being used for pain relief. Ice should never be put directly onto the skin for any length of time.

More-severe heel pain

If your pain is very bad and you find that resting, stretching, and supporting your foot don't help, you can ask your doctor about other treatments for heel pain.

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He or she might suggest a pain-killing injection or might refer you to another therapist for treatments such as **ultrasound** or **deep tissue massage**. Ultrasound is a type of scan done using a hand-held scanning device. The idea is that it sends sound waves into the tissue that can help to block pain signals. But there isn't much good evidence that it works.

Night splints hold the foot steady in one place while you sleep. If you use this treatment you will need to wear the splint for at least six hours a night for about eight weeks. Some people find that this helps reduce pain. But some people find them too uncomfortable to wear while sleeping.

Steroid injections (the full name is corticosteroids) can help reduce heel pain in the short term. These steroids are not the same as the anabolic steroids that some body builders use, but are similar to anti-inflammatory substances that occur naturally in the body.

Steroid injections can cause side effects in some people, including damage to the tissue of the foot.

If your pain is severe your doctor might suggest putting your foot in a cast, in the same way as if you had a broken bone. This treatment works well in many people. But you may not want to go as far as having your foot in a full cast.

Heel pain that doesn't improve with usual treatments

For people with the most severe pain that doesn't improve with other treatments, one option is **extracorporeal shock wave therapy, or ESWT** for short. With this treatment a therapist uses a device to send short energy waves into the painful tissue.

The device is placed on top of the skin ('extracorporeal' means outside the body) in the same way as an ultrasound device. Research suggests that it helps some people with severe heel pain. This treatment might be done in a hospital or outpatient clinic. You might need to have several sessions.

ESWT can cause mild pain. It can also cause bruising and numbness for a few days after treatment. In rare cases it can cause more serious damage to tissue.

Some people have **surgery** to release nerves that are trapped or compressed. But this is only suggested as a last resort for severe heel pain that doesn't improve with other treatments. It seems to work well for many people but, as with all types of surgery, there are risks. In particular surgery for heel pain can sometimes cause nerve damage.

What will happen to me?

Your heel pain should eventually get better by itself - especially if you rest your foot when possible and don't do anything that risks making the pain worse. And heel pain doesn't usually come back once it has gone.

The treatments listed above might help relieve the symptoms while you wait for the problem to clear up. But it may take several months for you to get back to normal. Some people have heel pain that lasts up to a year and a half.

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