

ACHILLES TENDONOSIS & ACHILLES TENDON RUPTURE



Knee + Foot + Ankle
— SURGEON —

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Introduction

The achilles tendon is the thick strap that can be felt running down the back of the calf into the heel. It is attached to, and worked by, the large muscles that make up the calf (gastrocnemius and soleus). When the achilles tendon pulls on the heel it makes us go up on tiptoe, Or propels us forwards when walking or running. If this tendon is not working it is difficult to walk and the ankle feels weak.

As we get older the tendon becomes stiffer and less able to absorb the repeated stresses of activities. Eventually small degenerative tears develop in the fibres of the tendon. The body tries to repair these tears. Because of inadequate blood supply at the lower end of the tendon, the repair is sometimes not complete. The tendon and its lining as a result become painful and swollen, and the tendon may feel weak. The combination of degenerative and repair processes in the tendon is called tendonosis (or sometimes tendonitis). Because the lining of the tendon is called its tenosynovium, inflammation of the lining is called tenosynovitis.

Tendonosis and tenosynovitis develop gradually there is pain and sometimes swelling in the achilles tendon. Initially, the pain is present mainly during activities such as running and playing sports, but later it may be present with walking or even at rest.

When there is a complete tear or rupture of the achilles tendon, there is usually a sudden pain in the heel or calf. Very often, it feels as though someone has kicked you in the calf. The heel usually becomes painful, swollen and bruised, and walking is difficult. Rupture of the achilles tendon is generally not preceded by tendonosis.

Achilles Tendonosis

TREATMENT

Achilles tendonosis or tenosynovitis can be treated like any other athletic or overuse injury in the first instance. You may need to reduce your mileage or the frequency of your sports for a while. When you do run or play, warm up longer and do plenty of achilles stretches. Your physiotherapist may help with a stretching program.

A change to a softer running surface and well padded running shoes may help. A 1/4" raise on your shoe will reduce the stresses on the tendon (remember to raise the other side too, to keep yourself balanced). When the pain and swelling is bad, it will usually be helped by applying an ice pack (a small bag of frozen peas or corn is ideal). For the pain, try simple pain-killers such as paracetamol. Anti-inflammatory medicines may reduce the inflammation in the tendon, but check with your doctor or pharmacist before taking these as they can have side-effects in some people.

Most people will improve with simple measures or physiotherapy. A small number continue to have major problems which interfere with their lifestyle. In this situation an operation may be considered. Your surgeon will take a history and examine your leg. You may then require x-rays, ultrasound or mri scan.

In tenosynovitis the tendon itself is reasonably healthy, stripping out the

inflamed tendon lining (synovium) often gives good results. In tendonosis, surgery involves removing the degenerate parts of the tendon and repairing the remaining tendon. If the degenerate area is small this can give quite good results. Often the degeneration involves a larger area of the tendon and removing it requires a large operation and may leave a large gap in the tendon. Repairing a gap in the may require a tendon borrowed from somewhere else, either higher up the achilles tendon or from the foot. Such a large operation may cause scarring, stiffness and weakness of the achilles tendon. For these reasons surgery for achilles tendonosis is only advised when the tendon problem is disabling.

Achilles Tendon Rupture

TREATMENT

The best treatment for a ruptured achilles tendon is uncertain. Most ruptures will heal if protected in a plaster or a boot for 6-8 weeks. Ruptures can be treated by surgery or in a boot or plaster cast (non-operative treatment). Non-operative treatment avoids the risks of surgery, but has a higher risk of another rupture of the tendon (10 - 15%), as compared to surgical treatment (3 - 5%). Surgery lessens the likelihood of weakness, loss of power and loss of calf bulk (size), but does not allow.

A quicker return to sport than non-operative treatment. Your surgeon will discuss these options with you and help you decide what is best for you.

After Surgery

You will be in a boot or plaster cast for 6 - 8 weeks; you will require crutches and may not be able to weight bear. Your mobility will be limited by swelling and discomfort. It is important that you rest in between walking to allow the pain and swelling to settle. At home, initially walking is kept to a minimum. You will require assistance with household chores such as cooking and cleaning.

After 6 weeks the cast or boot is removed, it may take another 2 weeks to be comfortable in closed shoes.

Driving is not allowed when in the boot, but may be resumed when comfortable, particularly when you are able to brake in an emergency, usually at the 8 week mark following surgery.

Returning to work can be dependent upon the activities of your employment, but is usually resumed at anywhere between 6 weeks and 3 months following surgery.

What are the risks?

Risks of surgery include infection, wound healing problems (especially in those who smoke, have diabetes or vascular disease), nerve injuries causing numbness along the side of the foot, rupture of the achilles tendon, stiffness, swelling, weakness, loss of calf bulk and blood clots (deep vein thrombosis and pulmonary embolism).

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After Surgery Timeline

3 MONTHS TO BE **fair**

6 MONTHS TO BE **good**

12 MONTHS TO BE **right**



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