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## Advice and Management Patient Information

# Achilles Tendinopathy

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## Notes

This booklet is designed to help guide you through the treatment and management of your Achilles pain. It is important that you read this carefully to give you a better understanding of your condition and how to treat it.

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## Other treatments

Other treatments can be considered if these initial treatment options fail. These should be discussed with your doctor or physiotherapist. Other treatments can include acupuncture, podiatry referral, high volume injection (saline and anaesthetic) or if all the above are not effective, a surgical option can be discussed.

## Helpful resources

### MyAnkle Online

Achilles Tendinopathy

### The Guardian Online

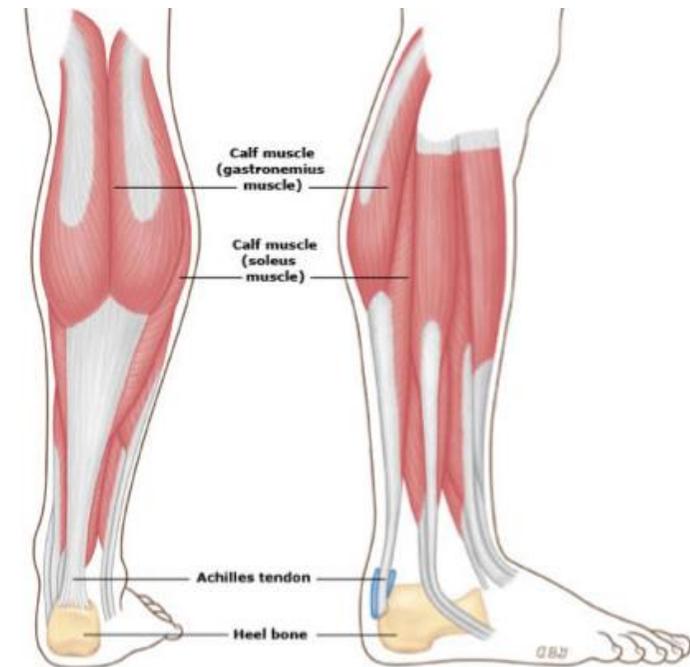
“Take the load off your feet: how to deal with Achilles Tendinopathy”

### Running-Physio.com

How to Manage Achilles Tendinopathy

## What is the Achilles tendon?

A tendon connects a muscle to bone. The Achilles tendon is the strongest tendon in the body and is found at the back of the lower leg, just above the heel bone. It connects your two calf muscles (gastrocnemius and soleus) to your heel bone and helps to lift your heel and push you forwards.



## What is a tendinopathy?

Current understanding is a tendinopathy occurs when a tendon is unable to adapt to the strain (load) being placed upon it. This will lead to small amounts of repeated damage within the tendon fibres. It will try to heal itself in response to the strain but will not always be able to do this. This condition can also be called a tendinitis or a tendinosis but is now more commonly termed a tendinopathy.

## What are the risk factors for developing Achilles tendinopathy?

- Tendon fibres will change with age and this condition is more common over the **age of 35**
- More common in **men**
- If you have a higher than average body **weight**
- If you have **Diabetes**
- Poor endurance **strength** of the calf muscle
- Poor strength/stability of the hip/knee
- Joint stiffness around the foot or ankle
- Sudden changes in activity ramping up training
  - Increase of duration training
  - Alteration in training (for an event/competition)
  - Sudden increase in distance
  - Old trainers that need replacement

## What are the signs and symptoms?

**Morning stiffness.** Stiffness around the tendon first thing in the morning. This maybe persistent but usually eases after a few minutes of walking.

**Tenderness** over the Achilles tendon. A small lump may develop or clicking from the tendon when moving the ankle.

**Variable pain** when exercising. Some people report being able to push through the pain when exercising, but after resting it the pain will increase and the ankle becomes stiff. Some people will experience severe pain which stops them from doing any exercise.

## Calf Stretches



### Stretch 3

Place the balls of your feet on a step or elevated surface that places you a few inches above the ground. Slowly lower your heels as far towards the floor as is comfortable.

Hold for \_\_\_\_ sets of, \_\_\_\_ repetitions.



### Stretch 4

Using a long bath towel or sheet. Sit on your bed or on the floor with your legs out in front of you. Wrap the towel around the ball of your foot just below your toes. Gently pull on the towel, allowing your foot to slowly bend up toward your knee while keeping your knee straight.

Hold for \_\_\_\_ sets of, \_\_\_\_ repetitions.

## Calf Stretches



### Stretch 1

Place one leg straight with the heel to the ground. Place the other leg, with the knee bent, in front of the straight leg and push your hips forward. Stretch your calf to the point where you feel a strong pull. Do not let your heels come off the ground.

Hold for \_\_\_\_ sets of, \_\_\_\_ repetitions.



### Stretch 2

Place both legs straight ahead and both heels on the ground with both knees bent. Move your hips backwards and drive your back knee towards the ground while still keeping the heels on the ground.

Hold for \_\_\_\_ sets of, \_\_\_\_ repetitions.

## Treatment management

Tendon injuries sometimes get better within a few weeks, but some more persistent cases last for several months.

Initial treatment of your tendinopathy could include:

- **Anti-inflammatory medication:**

Ibuprofen has been recommended for reactive tendinopathy. As with any medication consult your GP or pharmacist first.

- **Ice:**

Applying ice wrapped in a damp tea towel to the tendon to help reduce pain. Apply for 20 minutes, 4 times a day or post exercise.

- **Off load the tendon:**

Use a gel heel raise in your shoes or use sports tape on your calf. These are temporary measures when the tendon is sore and you will want to gradually wean off their use and increase the load to the tendon.

- **Massage**

Massage or foam roller the calf muscle to reduce tightness, but avoid massaging the tendon itself.

- **Relative rest:**

It's important to maintain your fitness using other forms of exercise. These can include swimming, cycling or running in water.

- **Stretching:**

Spend some time stretching your calf muscles using a gastrocnemius and soleus stretch.

## Load management

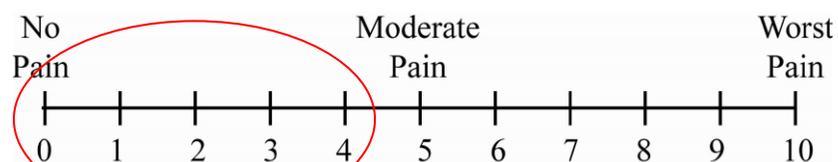
Once you have calmed down the initial symptoms with simple care, the most important treatment is a progressive loading exercise programme, which is currently the 'gold standard' for treatment.

You can be assessed and supported by your physiotherapist to follow this programme. This exercise programme can take up to 12-16 weeks before seeing a response from symptoms.

Even though you may not see the benefits immediately, it is important to persist with the programme.

## How to complete the exercise programme

It is most likely that when you start this exercise programme you will experience an increase in pain levels. This is normal and will settle as the tendon strengthens. You should not go beyond what you perceive to be more than mild to moderate levels of discomfort (4/10 Pain Scale).



If you find that the exercise continues to worsen the pain or your morning stiffness lasts longer, rest for a few days and consult your physiotherapist.

## Progression of exercises

When you start experiencing a reduction of pain during your exercises and you feel confident to start to progress your loading exercise programme, it may be time to change your exercises. You can do this by either:

1. Increasing the number of repetitions
2. Increasing the load by only using your BAD leg
3. Changing the intensity or the speed of the exercise
4. Discussing options with your physiotherapist

## Degenerative tendinopathy

If your pain is being experienced for a long period of time with regular flare-ups of symptoms, it is most likely due to a degeneration of your tendon. A tendon can become chronically thickened.

Management of chronic conditions needs to be treated less aggressively with on-going management of symptoms, rather than finding a full relief of pain. This could include:

1. Load management, reduce your activity levels or change the activity to reduce the pain
2. Simple eccentric loading with 3 sets of 15 repetitions, which can reduce the effects of pain
3. Vary your exercise to address the causes of the initial problem. Seek advice from your physiotherapist

## Concentric loading exercises



### Phase 1

Standing on both feet legs straight on the edge of a step with a weight in your hands, slowly lift up both heels so you are on your tiptoes and lower back down again.

Aim for \_\_\_\_ sets of, \_\_\_\_ repetitions.



### Phase 2

Standing on one foot leg straight on the edge of a step with a weight in your hands. Slowly lift up your heel so you are on your tiptoes and lower back down again.

Aim for \_\_\_\_ sets of, \_\_\_\_ repetitions.

## Types of exercises

The exercises issued are intended to reduce pain and improve function of the tendon and reversing the pathology of the tendinopathy.

Exercises issued will be based on your physiotherapist assessment and will take into consideration the load, frequency and speed of each muscle contraction.

The three different exercise asked to complete during your rehabilitation are call *concentric*, *eccentric* and *static*.

**Concentric** - A Muscle contraction that shortens a muscle.

**Eccentric** – A muscle contraction that lengthens the muscle.

**Static** – A muscle contraction where there is no to little movement of the muscle.

Before starting any exercises start by warming up your calf muscles. Discuss options with your physiotherapist.

## Static loading exercises



### Phase 1

Standing on both feet on the edge of a step, legs straight. Hold your heels level and prevent them from dropping down.

Aim to hold for \_\_\_\_\_ seconds, \_\_\_\_\_ repetitions



### Phase 2

Standing on both feet on the edge of a step legs straight. Gentle lift up both heels and hold.

Aim to hold for \_\_\_\_\_ seconds, \_\_\_\_\_ repetitions

## Eccentric loading exercises



### Phase 1

Standing on both feet legs straight. Use your GOOD leg to raise up onto your tiptoes. Transfer your weight across to your BAD leg and lower yourself down, use your GOOD leg for support as required.

Aim for \_\_\_\_\_ sets of, \_\_\_\_\_ repetitions.



### Phase 2

Standing on both feet legs straight on the edge of a step. Use your GOOD leg to raise up onto your tiptoes. Transfer your weight across to your BAD leg and lower yourself down, so your heel is lower than your toe Use your GOOD leg for support as required.

Aim for \_\_\_\_\_ sets of, \_\_\_\_\_ repetitions.