



PATIENT INFORMATION

Achilles tendinopathy rehabilitation – Non-insertional

The Achilles tendon inserts into the back of your heel, and has its origins in the gastrocnemius and soleus muscles in your lower leg. Achilles tendinopathy is the term used to describe a disorder affecting this particular tendon, and is a typically painful condition.

Research has shown that the two main contributory factors for Achilles tendinopathy are biomechanical (for example excessive foot pronation) and weakness in the tendon itself.

If poor biomechanics are the cause, then you may be provided with orthotics to correct this. However, if the cause is due to weakness in the tendon, then strengthening is required, and the steps below set out the strengthening programme that we recommend you follow.



Note:

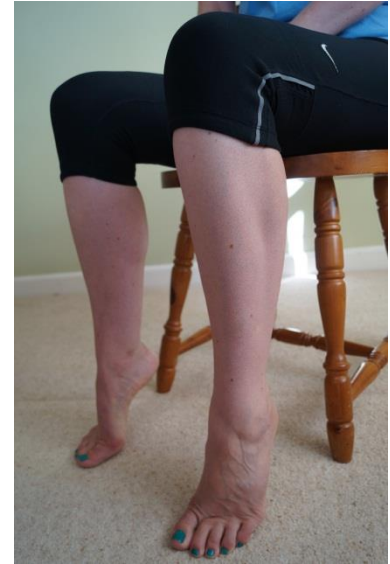
This exercise programme is based upon well documented and proven research. It is designed to be painful to undertake, but compliance has been shown to be successful.

Steps to strengthen the Achilles tendon:

Calf Raises - Sitting

1. The easiest way to start strengthening the Achilles tendon is to perform heel raises. Start by doing these while sat down in a chair, and as the tendon pain improves, try standing up.
2. Sat down, slowly raise both your heels off the ground together, so you are on tip toes. Keep your toes on the ground at all times.

3. Hold this position for 2 second, then slowly lower your heels until they are back on the floor.
4. Repeat this for another 9 repetitions, so you have performed this exercise 10 times.
5. After a rest, repeat steps 2 through 4 another two times, so that you have completed a total of 3 sets of 10 raises.



Once you can comfortably perform the above, it is time to undertake the same exercise, but standing.

Calf Raises – Standing

1. Standing, and using a support if necessary, slowly raise your heels off the ground.
2. Hold this position for 2 second, then slowly lower your heels until they are back on the floor.
3. Repeat this for another 9 repetitions, so you have performed this exercise 10 times.
4. After a rest, repeat steps 1 through 3 another two times, so that you have completed a total of 3 sets of 10 raises.



Once you can comfortably perform the above, it is time to undertake eccentric strengthening exercises.

Eccentric Training

This is a 12-week long programme, and needs to be carried out twice a day, 7 days a week.

Note:

This exercise programme is based upon well documented and proven research. It is designed to be painful to undertake, but compliance has been shown to be successful.

However, if at any time you are concerned about the exercise, its effects, or any pain that you are experiencing, contact the podiatry department for further advice.

1. Stand on a step, with your heels hanging over the back of the step, supporting yourself with a hand rail if required. See image to the right
In this example, it is the right Achilles tendon that is injured.



2. Take the injured leg off the ground, and perform a calf raise using the non-injured leg.



3. Place the ball of the foot of the injured leg next to the other.



4. Lift the non-injured leg off the ground, so that you are now supporting yourself on the injured leg only.



5. Now lower yourself down **slowly and in control**, until heel of the injured leg is back below the level of the step.



6. Repeat another 14 times, and take a short break
7. Now repeat steps 1 to 6 a further two times. You will then have completed 3 sets of 15 repetitions.
8. Next, repeat the above, but this time keep the knee of the weight bearing leg slightly bent.

By doing this, you are strengthening the tendon of the soleus muscle only.

Once the above becomes comfortable, you need to increase the load on the Achilles. This is achieved by wearing a backpack, and slowly adding weights, eg a bag of sugar at a time.