

## *Achilles tendon injury – Graeme Saker*

Hope this information is helpful to others whom may be unfortunate enough to suffer an Achilles tendon injury.....

The physiotherapists' opinion on strained or torn Achilles tendons was that rest only is **not** the cure. Although rest from running helps speed the recovery it will not heal without the **eccentric load exercises** to regenerate and strengthen the tendon. His view was that even if one rested for several months, as soon as running commenced the problem would return.

I tried many other management or treatment methods such as massage, icing, heel insert raises, elastic support, stretching, ultrasound and changing new trainers several times, all of which helped relieve the pain a bit, but were never going to be robust enough to get to the root of the problem.

The physio instructed me to start doing these exercises on my toes on the stairs with a straight leg and bent knee building up gradually to approx. 220 a day. Half of these were straight leg and half bent. The important feature to remember was to go up on both legs / toes but to come back down only on the injured leg. In fairness Louise had also suggested trying something similar off the bench in the gym. Another important element is to drop below stair level gradually until you can feel the stretch and pain was therefore to be expected. Care and common sense was to be taken though.

I eventually built this up to 40 on a straight leg, 40 on a bent leg in the morning with the same again at lunchtime and evening to total 240 a day. It was hard work and the immediate result was a tightening and tiredness in the calf. This was expected and therefore stretching exercises in between was a necessity, leaning against a wall again with bent and straight legs. The time frame for me was non-negotiable (12 weeks). No running but other activities because running would only aggravate it.

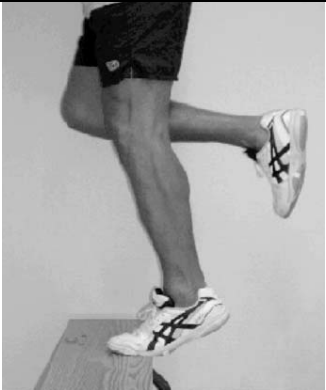
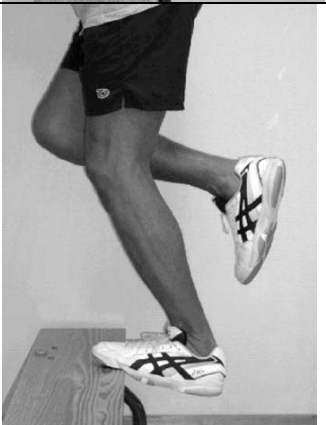
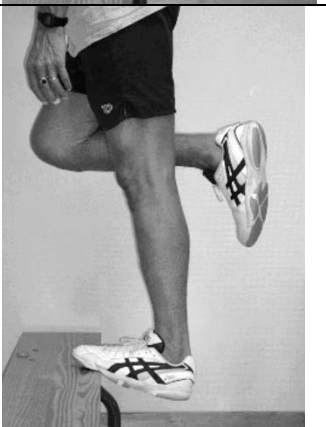

I went through spells where it improved and spells where the pain seemed worse, but battled on convincing myself that this was the only way through it. By 10 weeks it had improved and seemed stronger in the middle part of the tendon. This was the area that had been painful to touch before, but could now withstand some self-massage without too much problem.

One setback I had was a stabbing pain in the lower back of the heel (below the tendon) which is the insertion area, after about 8 weeks. This is where the tendon joins the heel bone at the bottom (a lump is often prominent) especially on some runners, but isn't a cause for concern as such. It can sometimes be painful and is known as the Haglund's deformity. What was causing this pain was the continued stretching that was helping the central tendon, but also "pulling out", in a fashion, the tendon from it's insertion.

At this point the physio made me a basic insert with a raised heel underneath, which I was instructed to wear in **all shoes** for two weeks while doing the same exercises, but not on the stairs. They then had to be done on the flat ground, thus **not** enabling you drop below the level like above on the stairs. After two weeks of exercises and wearing the insole this pain subsided, and I was then instructed to revert back to the exercises as before, but to hold back if any insertion area pain was felt at all.

Eventually after about 14/15 weeks the pain was cleared enough for me to resume jogging but exercises were still done on a lesser scale for a couple of weeks. In fact I still do some exercises now most days as a precaution.

See attached PDF document for examples and pictures although I never resorted to the rucksack on my back as an extra load.

<h1>ECCENTRIC STRETCHING PROGRAMME</h1> <p>The eccentric stretching programme should be performed twice daily, 7 days a week for 12 weeks. Stand with the body weight on the forefoot of the painful leg and load the calf-muscle by lowering the heel below the forefoot. Push back up with the other leg in order not to concentrically exercise the affected leg or push up on parallel beams to the side. The exercise should be performed with the knee straight and also bent (in order to maximise activation of the soleus).</p> <p>Each of the 2 exercises is performed 15 times and repeated 3 times (3 reps of 15). Muscle soreness during the first 2-3 weeks is to be expected. Patients should experience discomfort but not disabling pain. If after a few weeks, the exercise may be performed without even minor pain a weighted back-pack may be added to gradually increase loading of the tendon.</p> <p>Light jogging on flat ground may be started at 4-6 weeks during the regimen if it is not painful or only causes mild discomfort. Thereafter, activities may be introduced and gradually increased as long as no severe pain in the tendon is felt.</p> <p>***Important - this programme should be supervised by a registered physiotherapist**</p> <p>Reference: Martin Fahlstrom, Per Jonsson, Ronny Lorentzon, Hakan Alfredson. Chronic Achilles tendon pain treated with eccentric calf-muscle training Knee Surg Sports Traumatol Arthrosc (2003) 11 : 327–333</p> <p><b>Hampshire Foot and Ankle Centre</b> <b>www.foot-ankle.co.uk</b></p>		Starting position with the ankle in plantar flexion and the knee slightly bent
		Eccentric loading of the calf with the knee slightly bent
		Eccentric loading of the calf with the knee straight
		Increase the load by adding weight in the back-pack