ACHILLES TENDONOPATHY
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What is Achilles Tendonopathy?
Achilles Tendonopathy is also known as Achilles Tendonitis. It is a condition where there is pain and swelling of the achilles tendon just above the heel. Whilst it is not a true inflammation of the tendon, there is a lot of swelling and pain associated with it and this markedly limits a person’s ability to run and play sport. We are really unsure as to the cause of the actual problem but it almost certainly represents degeneration and wear and tear in the tendon over a prolonged period of time.

What are the symptoms?
Some people will have swelling of the achilles tendon without very much pain but the majority of people will have significant pain related to the achilles tendon after physical activity. In mild cases, the pain only occurs after a bout of running or exercise but in more severe cases there may be pain at rest and especially pain in the tendon when you first get out of bed in the morning. This feels stiff and tends to free up with time and activity.

What causes Achilles Tendonopathy?
There are many predisposing causes to the development of Achilles Tendonopathy but like many other problems of tendons and ligaments, age plays a big role. It is rare to see Achilles Tendonopathy under the age of 35 and it certainly increases with age. We know that over activity and over– stressing of the tendon also contributes to the development of tendonopathy.
Specific causes relate to over-training, over-stressing the tendons such as excessive jumping or running up hills as well as running on hard surfaces or using poor shoes. Specifically, flat feet or pronation of the feet is a common contributing cause. There are certainly a group of people who have tight calf muscles and this may also contribute.

There is a group of people who are at particular risk and these include people with diabetes, gout and sometimes people taking medications that may precipitate inflammation in the ligaments.

**What are the risks?**

We are also worried about the risk of rupture of the achilles tendon and there has long been a concern that people with tendonopathy of the achilles tendon are at increased risk of rupture. Recent research shows that this is almost certainly not true and that people with tendonopathy still have strong tendons. So, apart from the pain, swelling and difficulty with running, there seems to be no significant long term risk of having chronic Achilles Tendonopathy.

**Are any tests needed?**

In patients with straightforward Achilles Tendonopathy then investigations are almost never required. In people where the pain has come on quickly or following a sudden injury it is vitally important to be sure that there is not a partial tear of the achilles tendon. The achilles tendon can be seen quite well on ultrasound examination and this is probably the test that is best suited for assessing the achilles tendon. In people with severe Achilles Tendonopathy then an ultrasound is often useful for assessing the grade and severity of the tendonopathy so that correct treatment can be given for it.

**What can I do to treat this?**

The main stay of treating Achilles Tendonopathy is to make a diagnosis nice and early so that treatment will work when the injury is still quite fresh. The most important thing is to institute treatment for pain and swelling very early. This is best achieved through the use of ice and relative rest and the use of anti–
inflammatory medications. A supervised rehabilitation program from the physiotherapist is advised so that specific treatments including transverse friction massage as well as the possible use of a heel raise for a short time can be commenced.

As the Achilles Tendonopathy is settling, it is very important to institute a calf muscle stretching program and this should be followed by calf muscle strengthening program in order to reduce the risks of overuse of the tendon.

**What are the specific treatments available?**

A lot of research has gone into the treatment of chronic Achilles Tendonopathy as this is a very difficult condition to treat and often fails to respond to normal physiotherapy treatments. In the first instance, it is important to exclude predisposing causes such as flat feet and treat this appropriately with orthotics. Muscle stretching of the calf is essential and it is important to realise that the tendon is not at risk of tearing significantly and so a strengthening program should be instituted very early.

A significant number of people will improve with aggressive strengthening of the calf muscle with what is called Eccentric Muscle Strengthening and this must be supervised by a physiotherapist. This is quite a painful exercise and will reduce the swelling and pain over a six to eight week period of time and often result in very good long term benefit.

Other treatments that have been shown to work include injection therapies. Cortisone or steroid injections into the achilles tendon are generally best avoided. There is certainly evidence that heavy exercise following a cortisone injection into the tendon is associated with an increased risk of rupture of the tendon. This does not mean that cortisone injections are not beneficial in this condition and provided they are done properly into the sheath around the tendon with minimal trauma in the first few days following the injection, this can result in excellent levels of improvement in the chronic situation. A newer form of injection called Aprotinin has been used and this gives quite good results in the treatment which are at least comparable to cortisone injection. This does not appear to have the same risks associated with rupture of the tendon.
Extracorporeal shockwave therapy or radial shockwave therapy have been used in this condition and often result in good improvement. The success rate of alleviating or reducing pain in Achilles Tendonopathy is of the order of 70 to 75%. The nature of the Achilles Tendonopathy will determine the likely outcome. People who have typical tendonopathy will often respond but people where the inflammation is related to the bone of the heel or the capsule around the tendon will often not respond as well.

Surgery is sometimes required in the treatment of chronic Achilles Tendonopathy. In this situation the sheath surrounding the tendon is opened so that the pressure is released from the tendon and any degenerative material is removed to encourage an improvement in blood flow. Surgery will often result in very good alleviation of pain but the swelling related to the surgery will take some weeks to settle down.