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## **ACHILLES TENDON DISORDERS**

### **What causes pain in the Achilles tendon?**

Pain in the Achilles tendon is a common condition. It is often seen in high performing athletes, particularly runners, but can occur in non-athletic individuals. Symptoms tend to occur between the ages of 30 and 50, but can occur outside these ranges. The pain is usually caused by a degenerative process in the Achilles tendon, which is caused by a chronic lack of oxygen and poor blood supply. Inflammation and tightness of the membrane (the paratenon) around the Achilles tendon can also play a role in this problem, as can micro-tearing of the fibres of the tendon caused by overload.

### **What are the symptoms?**

Usually, pain is the main presenting symptom. This can be accompanied by swelling and inflammation around the tendon, which is most commonly seen and felt approximately three to six centimetres above the heel. Rarely, the tendon is weakened to the point that it can rupture.

### **What are the treatment options for Achilles tendon pain?**

#### **1. Physiotherapy**

In many cases physiotherapy treatment with stretching, ultrasound, massage and muscular exercises to improve the walking cycle will settle down Achilles tendon pain. Following successful physiotherapy treatment it is important to continue the stretching exercises indefinitely to maintain the condition in the longer term. It may be necessary to provide orthotics, particularly if there is a biomechanical problem with the lower limbs.

#### **2. Minor Surgical Interventions**

- **Steroid injection** This is occasionally used when there is an abundance of inflammation in the tendon sheath that surrounds the tendon. It can be complicated by rupture of the Achilles tendon and is therefore not commonly used.
- **Stripping of tendon sheath** This can be successful when the tendon sheath is seen to be thickened and tight on an MRI scan
- **Coblation treatment** A minor operation is performed where a special probe is inserted into the tendon in a grid fashion. The probe emits high frequency radio waves, which alter the molecules of the tendon and ease the symptoms.

Plaster casts may not be required following these procedures. The result may take some weeks to become clear. If the procedure is not successful then a major procedure may be required.

#### **3. Major Surgical Interventions**

- **Debridement of tendon.** The tendon is opened and the diseased portion removed. It may be necessary to remove up to 80-90% of the tendon. The ankle is rested in a plaster for two weeks in order to allow the wounds to heal and physiotherapy starts once the plaster is removed. Aim to build up to full weight bearing and movement in four to six weeks.
- **Flexus Hallucis Longus (FHL) Tendon transfer.** The large flexing tendon of the big toe is transferred to the Achilles region to reinforce the tendon after the diseased portion of the Achilles has been removed. Following this operation the ankle is in plaster for six weeks and a removable boot for a further six weeks.