

PLANTAR FASCIITIS IS A COMMON AND DEBILITATING CONDITION AMONG ATHLETES. CHARTERED PHYSIOTHERAPIST **DANIEL LAWRENCE** EXPLAINS WHAT IT IS AND SOME POSSIBLE REMEDIES

THE plantar fascia consists of a band of tough fibres running across the sole of your foot from the heel to the base of your toes. It is the thickest fascia in the body and is able to resist the large repetitive forces placed upon your feet during running and jumping activities. Although the fascia is a tough and insensitive structure, it does suffer from a poor blood supply and this explains the prolonged healing times required for the condition known as plantar fasciitis.

Plantar fasciitis is most prevalent in sports that involve repetitive jumping or running and hill running is a common contributor to the small tears that accumulate in the fascia, causing inflammation and pain underneath the heel bone. A burning sensation in the arch of the foot may also be felt. Sufferers often describe a feeling akin to stepping on a stone under their heel.

Increased pain during the first few steps in the morning is characteristic of this condition. This pain eases after the fascia and muscles begin to stretch. This symptom is linked to a tight Achilles tendon and this must be considered when designing your treatment programme.

Treatment

Although a period of rest will help resolve this condition, avoiding standing on your affected foot is not easily achieved and non-weight bearing would lead to further problems from muscle weakness and loss of fitness. Taping the injured foot has become a popular option for the reduction of pain in the early stages. The techniques are not too difficult to apply, but an extra pair

of hands is useful. Two techniques are detailed here: one using rigid sports tape and another using elastic kinesiology tape.

Taping technique one: This application utilises the rigid tape as a supportive brace to help offset some

Sole train



of the force on the plantar fascia. 1. Place a strip of tape across the front of the foot under the toes (Pic 1). 2. Wrap a long strip of tape around the back of the heel starting from the ball of the foot and finishing under the little toe (Pic 2). 3. Reinforce your taping application by placing overlapping strips on to the existing tape (Pic 3).

Taping technique two: This new technique is simple to apply, but its effectiveness has not been substantiated. 1. Cut a strip of tape that matches the length of your foot



including your toes. 2. Round the square edges, to avoid peeling, then remove about 5cm of backing paper at one end. 3. Stick the tape behind your heel just on the base of your Achilles tendon. 4. Remove the remaining backing paper and stretch the tape over the sole of your foot towards the base of your big toe (Pic 4). 5. Firmly rub the tape down on to the skin to ensure a good stick, avoiding exerting any stretch in the final part of the tape strip. Due to the pressure placed on the tape and the humidity within your shoes, I would recommend replacing the tape at the beginning of each day.

Golf ball massage is a treatment that is not tolerated by all sufferers, but it is a proven technique to promote healing and reduce the build-up of scar tissue. To perform this simple exercise, roll a golf ball back and forth under the arch of your foot with particular focus on the tender area under your heel. This can be performed for five minutes, a couple of times a day, or more frequently if tolerable.

Prevention

Cause and prevention are important factors to consider, as plantar fasciitis commonly reoccurs. A tight Achilles tendon is one of the main risk factors for this condition and this should be managed through the use of regular and prolonged calf muscle stretching with both a straight and bent knee.

Overpronation of the feet is also a major contributory factor. Assessment of your foot position and posture is important when selecting your training shoes. Incorrect shoe type or excessively worn shoes can place extra pressure on the plantar fascia and aggravate an existing condition. Orthotic inserts may be required if the foot position is not suitably adjusted through the correct choice of shoe.

Conclusion

Plantar fasciitis is an irritating condition and pain is most apparent in the mornings. Its location on the sole of the foot makes resting the fascia difficult, but this can be partially eased through the use of taping techniques. The longevity of the extended healing time required by this condition lends itself to the use of effective self-treatment techniques, but professional help should be sought for the correct diagnosis, specialist treatment and future prevention.

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