

# How can I help my patient with plantar fasciitis do the 'Bay Walk'?

Commentary by  
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**Inflammation of the plantar fascia is the most common cause of heel pain, but several other conditions need to be considered.**

## Case scenario

A 50-year-old man, who is otherwise well, has had plantar fasciitis for one year. Insoles and stretches bring him good relief but he cannot do the 'Bay Walk', an 8 km walk near his home. How can I help him?

## Commentary

The first thing to ask this man is whether he really wants to do the 8 km walk, considering that he may do some further damage to the injured area and may turn episodic pain into continuous and more severe pain. If he understands this and is willing to take the risk, he will need help from his doctor.

Before any further treatment is given, the diagnosis should be confirmed; the term 'plantar fasciitis' is often used loosely to denote any sort of pain around the heel (admittedly, the most common cause of heel pain is plantar fasciitis).

## Investigations

Plain x-rays are of limited value. It is common to find a spur on the under surface of the calcaneum, which is sometimes seized on as the cause of the pain. However, there is no correlation between the presence of a calcaneal spur and the occurrence of symptoms. The calcaneal spur is an incidental finding and nothing more.

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The two radiological methods that really do help are a nuclear bone scan and an ultrasound. The nuclear bone scan involves the injection of a detectable radiotracer that is taken up more in an area of tissue damage than in surrounding tissue, appearing as a 'hot spot' on the scan. In many cases, the position and intensity of the hot spot make it possible to confirm the diagnosis of plantar fasciitis or point to another likely diagnosis.

An ultrasound can give very good definition of soft tissue structures, which cannot be seen on plain x-rays. In plantar fasciitis, the usual ultrasound appearance shows an area of swelling of the plantar fascia close to its posterior attachment. The plantar fascia can be up to twice its normal thickness.

## Differential diagnoses

Occasionally, there is complete rupture of the posterior attachment of the plantar fascia. This is usually seen in runners, especially sprinters, but can occur in energetic walkers. Without an ultrasound, this diagnosis will be missed and the patient's lack of improvement will no doubt puzzle the doctor.

Stress fractures of the calcaneum are being found increasingly in walkers and runners, so it is wise to perform a nuclear bone scan looking for increased uptake in the calcaneum. This is something you will not find unless you look for it.

The tendons of the tibialis posterior, flexor digitorum longus and flexor hallucis longus muscles often degenerate in

middle age and may even rupture. They can cause pain on the undersurface and medial surface of the heel, and can easily be confused with plantar fasciitis. These structures show up well on ultrasound.

The small nerves that pass around the medial side of the planter fascia close to the heel may become entrapped and require surgery to decompress them. This condition can sometimes arouse suspicion because of the finding of a small area of tingling or numbness on the inferomedial aspect of the heel.

## Management

Having ascertained the correct diagnosis and assuming that it is plantar fasciitis, the first step in treatment should be to revise the orthotics. If the orthotics were purchased 'off the shelf' it would be wise to send the patient to an orthotist or a podiatrist to have custom-made inserts. If the orthotics were made by an orthotist or podiatrist, there is nothing wrong with sending the patient back to have them reviewed. It often takes two or three visits to get the inserts exactly right.

Plantar fasciitis is one of those conditions, like tennis elbow, where an accurately placed injection of hydrocortisone can often give prompt and long lasting relief. Hence, if the pain persists, this should be the next step after optimising the orthotics.

Some, but not all, patients gain considerable relief from massage and they can be taught to do this themselves. Physiotherapy may also be helpful.

Sometimes patients are so anxious to reach their self-imposed goal that they will go through any amount of treatment, but, when they find that there is no magic formula, they may change their minds and opt for less vigorous walking. This is the time to suggest tactfully that the patient will be no worse off if he or she does not reach the goal of doing the 8 km walk and that perhaps other modes of exercise, such as swimming, may be preferable. **MT**