

Adult Flatfoot

Tibialis posterior dysfunction (Acquired flatfoot)

The Tibialis Posterior (TP) tendon is one of the major stabilizing structures in the foot. It runs behind the bump on the inside of the ankle (the medial malleolus) and across the instep where it inserts.

The main functions of the tendon are to support the arch and keep the foot turned inwards when walking. The TP can become damaged by wear and tear or acute trauma. In the initial stages pain is felt along the length of the tendon (behind the medial malleolus). As the problem worsens deformity becomes apparent and the foot flattens and turns outwards.

Pain may develop on the outside of the ankle and if the deformity continues to worsen over time the joints in the hindfoot become affected and can become arthritic.

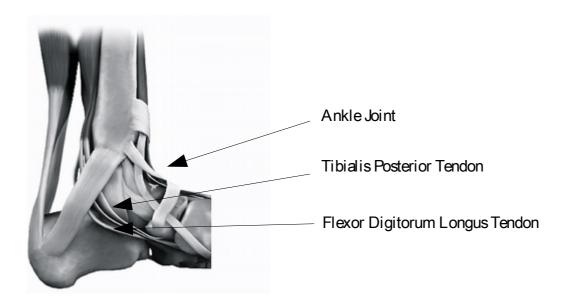
The surgical treatment is complex and depends on the location and severity of damage.





Non-operative treatment

In the early or mild stages of TP tendon dysfunction simple painkillers, orthotics, physiotherapy and occasionally steroid injections are used. Sometimes this is not sufficient and the problem progresses or the foot becomes arthritic. In this case surgery can help.



Operative treatment

In most cases the tendon itself is repaired and needs to be strengthened by using another tendon, flexor digitorum longus. This tendon lies alongside tibialis posterior at the ankle and bends the small joints of the toes. Other tendons help to carry out this function and so the tendon is not really missed when it is used.

To improve the biomechanics of the tendon transfer the heel bone is moved towards the inside of the foot (calcaneal osteotomy), held with one screw and a plug is inserted into the subtalar joint to support the arch. The plug and screw are generally removed in a second operation when the tendon is strong enough, about six months after the first operation. This is a small day case operation and recovery is swift.

In more advanced cases, up to three of the joints in the foot can become arthritic. These joints (subtalar, talo-navicular, and calcaneo-cuboid) are fused using bone graft taken from either the heel or the hip bone. This is known as a "triple fusion."

The recovery from tendon reconstruction or fusion surgery is lengthy. You will spend 6 weeks in a cast and then undergo an intensive rehabilitation program as directed by your physiotherapist.



Triple Fusion



Risks and complications

No surgery is risk free. The risks and complications will be assessed and discussed with you. There is always a small risk of infection, blood clots and anaesthetic problems and measures are taken to reduce these. There is usually a 5-10 % chance of experiencing a problem of some kind with this type of surgery. A satisfactory outcome is expected in 90% of cases.

Recovery

Hospital stay 2 nights
Rest & Elevation 1 week
Suture removal 2 weeks
Time in plaster 6 weeks
Crutches required 6 weeks
Foot swelling 3 months
Implant removal 6 months

Result times

-Good 3 months
-Better 6 months
-Best 12 months

This brochure is a brief overview of the surgical management of tibialis posterior dysfunction and not designed to be all-inclusive. If you have any further questions, please discuss them with your surgeon.