

Tibialis Posterior Tendon Dysfunction (Acquired Flatfoot)

The tibialis posterior (TP) tendon is one of the major stabilising structures in the foot. It runs behind the bump on the inside of the ankle (the medial malleolus) and inserts into one of the bones of the instep (navicular). 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.

Initially, pain is felt along the length of the tendon (behind the medial malleolus), but 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 hind foot become affected and can become arthritic. The surgical treatment is complex and depends on the location and severity of damage.

NON-OPERATIVE MANAGEMENT

In the early or mild stages of TP tendon dysfunction, simple painkillers, orthotics, and physiotherapy are used. Sometimes this is not sufficient and ankle bracing or the use of a custom moulded splint is required. If these non-operative methods prove inadequate to control symptoms or the problem progresses, surgery may be helpful.

OPERATIVE MANAGEMENT

In most cases the tendon itself is debrided of damaged tissue and repaired but it also needs to be strengthened by using another tendon, flexor digitorum longus (FDL). This tendon lies alongside tibialis posterior at the ankle and bends the small joints of the toes. Other tendons also 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) and held with one screw. In addition, a plug is inserted into the outer portion of the foot (sinus tarsi) to assist in supporting the arch. The plug and screw are generally removed in a second operation once the transferred tendon has become strong. This is usually around 6 months after the first operation. This is a small day case operation and recovery is usually swift.



In more advanced cases, up to three of the joints in the foot can become arthritic. These joints (subtalar, talo-navicular, and calcaneocuboid) held in place with a series of screws and fused using bone graft taken from either the heel or the hipbone. This is known as a triple fusion.

TRIPLE FUSION

The recovery from tendon reconstruction or fusion surgery is lengthy. You will spend 6 weeks in a cast and then undergo a rehabilitation program that often requires the assistance of a physiotherapist. After 3 months (once swelling has settled), new insoles are usually required to assist in supporting the arch.





RISKS & 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.

Specific risks include tendon re-rupture or progressive arthritis requiring further surgery, nerve damage resulting in numbness of the foot, wound or bone healing issues, and failure to relieve pain. Despite these risks, a good outcome is expected in 90% of cases.

RECOVERY TIMES	
Hospital stay	2-3 nights
Rest & elevation	7-10 days
Plaster (Non-weight bearing)	6 weeks
Foot swelling	3-6 months
Implant removal	6 months

TIME OFF WORK

Seated	4-6 weeks
Standing	3 months

RESULT TIMES (PAIN RELIEF & FUNCTION)

Good	3 months
Better	6 months
Best	12 months

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