

Surgery to repair/reconstruct the tibialis posterior tendon

What is the tibialis posterior tendon?

The tibialis posterior tendon serves as one of the major supporting structures of the foot, helping it to function while walking. Sometimes this tendon can become overstretched or inflamed leading to a progressively flat foot. There are several names for this type of condition such as, tibialis posterior tendon dysfunction, adult acquired flatfoot deformity and tibialis posterior insufficiency. These terms all describe the same condition.

Factors that contribute to a person developing this problem include age and gender, existing flat feet, weight and medical conditions. Symptoms develop in stages and range from mild pain and swelling to considerable pain, inflammation, stiffness and deformity.

What type of surgery is suitable for me?

The degree of damage to the tendon decides the type of surgery – either repair or reconstruction. Repairing the tendon is simple compared to reconstruction and recovery following repair will be quicker than reconstruction.

How is the repair/reconstruction done?

Repair of the torn tendon involves stitching along the length of the damaged tendon and may or may not need a heel osteotomy (moving pieces of bone).

However, if your tendon is very diseased or damaged, a reconstruction is recommended. This generally involves an osteotomy of the heel bone (Calcaneum) and a tendon transfer (Flexor Digitorum Longus (FDL) – tendon of the foot) to the Navicular bone (small bone at the top of the foot). Not infrequently, additional procedures may be required, including calf muscle lengthening or osteotomy of a midfoot bone (Cuneiform/Metatarsal). (This will be discussed by your surgeon if this applies to you.)

The operation is done through several incisions (cuts) – one on the outer side of the heel to cut the heel bone and another on the inner side of the ankle to remove the damaged tendon and to do a tendon transfer. Further incisions may be required for additional procedures.

A cut is made in the heel bone; the cut bone is moved inwards and fixed with one screw/plate.

The damaged tendon is removed and another tendon (FDL) is attached to the navicular bone through a drill hole and secured using a bone anchor.

The wound is closed with dissolvable stitches. Your foot will be protected in a below-knee back slab.

You will be admitted on the day of operation and kept for 1 or 2 nights depending on the pain control and your mobility. You will be assessed by a physiotherapist before leaving hospital. The operation takes about 1½ to 2 hours and is done under a general anaesthetic (you are asleep) or a spinal anaesthetic (you are awake but the area is numbed and you may be drowsy).

How will I feel afterwards?

Pain can be moderate to severe to the scale of 6-8 out of 10. You will need some painkillers for the first few days. You need to keep the foot elevated for the first few days until the swelling settles.

You will be non-weight bearing on the operated leg for a period of 6 weeks and have a below-knee cast for that duration to protect the foot. This means that you cannot put any weight through the operated leg. After 6 weeks, you will be placed in a boot for a further 3-4 weeks and you may start gradual weight bearing.

You will have a follow up appointment in clinic 12-14 days after surgery to check the wound and change the plaster cast. At 6 weeks following surgery you may be allowed to start weight bearing in a boot.

You may need 3-4 months off work depending on the nature of your job.

You won't be able to drive until you can do an emergency stop without any pain in the foot this is likely to be 2-3 weeks after removal of your boot or plaster.

Preparing for your surgery:

Non-weight bearing means putting no weight through the foot. Hopping is very energy consuming and tiring. If you are young and fit hopping with crutches and hopping up stairs may be possible. However if you are older, frail or have medical conditions that affect your balance or ability to hop on one leg mobilising non-weight bearing will be very difficult if not impossible. If you struggle to mobilise even short distances with a frame you will be unable to manage the stairs.

Mobilising on one leg severely curtails normal activities such as cooking, making hot drinks, washing and dressing. Prior to coming into hospital you should arrange where possible to have someone stay with you during your recovery period or to stay with friends or relatives. **Bear in mind that it maybe 3 months before you are allowed to fully weight bear through the foot.** If you live in a house and you suspect stairs are going to be difficult you should arrange for a bed to be brought downstairs (this cannot be done by the hospital). If you have more than one step at the front or back door you may find that it is difficult for you to access your house and you may wish to consider staying elsewhere. It might also be a good idea to stock the freezer with pre-prepared meals that can be reheated or microwaved. Bear in mind that you will not be able to carry anything while mobilising non-weight bearing so preparing an area close to the microwave/cooker where you can eat you meals may be a good idea.

As this is planned surgery the hospital does not provide equipment except walking aids. If you don't have a downstairs toilet and you think you won't be able to manage the stairs then a commode is recommended. If you do have a downstairs toilet a glide-about commode (a commode on wheels) will allow a carer to push you to the toilet. A perching

stool will also allow you to sit to have a strip wash, to clean your teeth, prepare and eat meals in the kitchen.

This equipment can be loaned from the Red Cross or other mobility agencies; ask your pre-op nurses for information or contact the occupational therapists on the number at the end of this booklet.

Please note: Community hospitals or community rehab teams do not accept patients who are non-weight bearing.

Leaving hospital

After your operation you will be discharged home. If a package of care is required to assist with personal care i.e. washing and dressing as you have no support at home this will be arranged prior to discharge. Depending on circumstances you may be expected to arrange and pay for this yourself.

Even once the boot is removed and you are allowed to fully weight bear on the leg it may be several weeks before you feel completely comfortable. As a consequence of this you may need some assistance for 3-4 months.

What risks are there involved in the procedure?

General complications of foot surgery

- Infection. There is a small risk of infection with all surgery. If this occurs it will be treated with relevant antibiotics. Look out for redness and discharge from the wound.
- Deep Vein Thrombosis. Also known as Venous Thromboembolism (VTE), this is a rare complication of foot surgery. If you have had a DVT in the past, please tell your surgeon. Most patients are routinely prescribed injections to thin your blood for up to six weeks following surgery to reduce the risk of developing a blood clot.

Specific complications of the tendon repair

- There may be damage to the local tendons and nerves and this may result in numbness and pain around the surgical site that could take months to resolve. In some people numbness persists but this is not usually troublesome.
- The tendon repair / reconstruction is initially weak after surgery and may fail or not heal.
- Delayed or non-union of the osteotomy (bone cuts not knitting together) may occur although this is rare.
- Prolonged swelling and stiffness for several months is not uncommon
- Residual symptoms of pain and deformity can occur and therefore insoles are routinely recommended in the long term.

If there is anything you do not understand or if you have any questions or concerns, please feel free to discuss them with your doctor or nurse.

Where to get further information

For more information about the Trust visit our website www.royalberkshire.nhs.uk

Useful numbers and contacts

Adult Day Surgery Unit:	0118 322 7622
Redlands Ward:	0118 322 7484 / 7485
Pre-operative Assessment:	0118 322 6546
Occupational Therapy	0118 322 7560
Physiotherapy	0118 322 7817

This document can be made available in other languages and formats upon request.

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