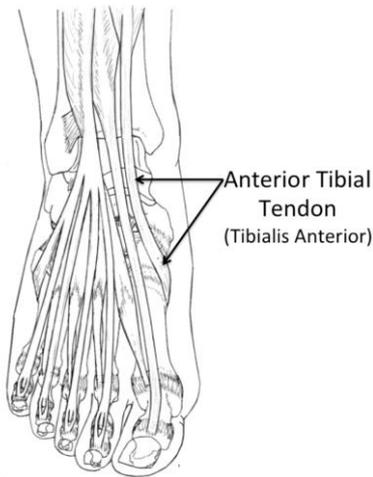




Tibialis anterior pathology



The tibialis anterior tendon runs over the front of the ankle on the inside and then inserts on the inside of the midfoot.

The function of the tibialis anterior is to dorsiflex the ankle (pull the foot up).

Distal tibialis anterior tendinopathy

This is when there is degeneration of the tendon where it inserts into the base of the 1st metatarsal and medial cuneiform.

This commonly occurs in 50-70 year old women
It is not commonly associated with an injury

What are the symptoms?

- Burning pain on the inside of the midfoot at the insertion of the tendon.
- Night pain is a common feature because the foot relaxes putting the tendon under tension
- Swelling over the medial midfoot

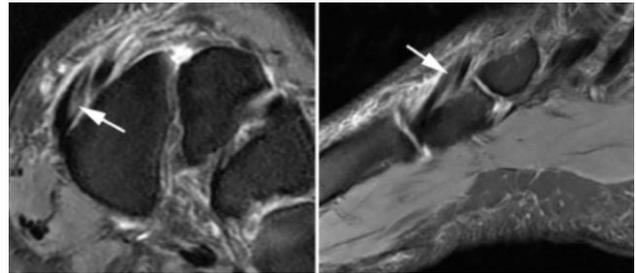
What are the common examination findings?

- Tenderness over the insertion
- Pain on stress testing the tendon
- Reduced ankle motion
- Weakness of the tendon

Investigations

Xrays are required to exclude arthritis as a cause for the pain and for assessing the foot shape.

MRI is the most useful at looking at the quality of the tendon, how much of it is degenerative and whether there is a split or tear.



Nonsurgical Treatment

The response to treatment depends on the extent of the tendon splits and degeneration.

- Simple pain relief
 - Paracetamol
 - Short course anti inflammatories
- Steroid injection - rarely
- Activity modification
- Physiotherapy
 - Swelling management
 - Range of motion exercises
 - Strengthening
- An off the shelf arch support orthotic
- A night splint to help hold the ankle in a neutral position

When is surgery considered?

- When non surgical treatment has failed and the symptoms are interfering with function and quality of life
- There is >50% tearing of the tendon which possibly predisposes it to rupture.

Surgical procedures

<50% degeneration of the tendon

- Tendon debridement and repair
- Bone spur resection

>50% degeneration of the tendon

- Tendon transfer of the great toe tendon to tibialis anterior
- Transfer of a tendon to the great toe and stabilisation of the great toe to prevent sagging



What does the rehabilitation involve?

Rehabilitation and recovery times are determined by the specific surgery required.

- 1 night in hospital.
- 2 weeks in a cast non weightbearing with elevation of the foot

Tendon debridement

- 4 weeks in a CAM Boot full weightbearing
- Physiotherapy to begin at 4 weeks from surgery with active ankle dorsiflexion and plantarflexion exercises
- Transition into a supportive shoe with a full length arch support at 6 weeks from surgery
- Physiotherapy to progress to resistance exercises at 8 weeks from surgery
- By 3 months returning to recreational walking
- Swelling resolution by 6 months

Tendon transfer

- 4 weeks in a CAM Boot non weightbearing
- At 6 weeks from surgery transition into a Cam Boot and begin progressive weightbearing over a 6 week period.
- Physiotherapy to begin at 6 weeks from surgery with active ankle dorsiflexion and plantarflexion
- By 3 months managing daily activities
- Return to recreational walking by 6 months
- Swelling resolution by 9 months

How long will I be off work?

This is dependent upon your occupation and the specific surgery.

- Seated job 2-4 weeks
- Standing job 8-12 weeks
- Heavy lifting job 4-6 months

When can I drive?

This is dependent upon your specific surgery.

- Manual car
 - No driving
 - 7 weeks (repair)
 - 12 weeks (transfer)
- Automatic car
 - Left foot no driving for 2 weeks
 - Right foot no driving
 - 7 weeks (repair)
 - 12 weeks (transfer)

What are the risks of the procedure?

General risks of surgery

- Infection and wound healing problems
- Nerve injury and scar sensitivity
- Blood clots to the leg
- Anaesthetic problems
- Incomplete resolution of symptoms
- Persistent pain

Specific risks of surgery

- Ankle stiffness
- Weakness

Tendon repair

- Re-tearing of a repaired tendon

Tendon transfer

- Failure of the tendon transfer
 - Rupture
 - Stretching out over time
- Lag of the great toe

Tibialis anterior tendon rupture

This can occur with minor trauma and commonly occurs in 60-80 year old males when the tendon is degenerative.

Patients often present late.

They are aware of weakness or a foot drop

They may be aware of a lump at the level of the ankle joint.

What is the non operative treatment?

An AFO splint can be used to support the foot during walking.

A rocker sole shoe can also be helpful.

What is the surgical treatment?

Surgery is the preferred treatment to repair or reconstruct the tendon and restore normal function.

In most situations because the tendon is degenerative a direct repair is not possible.

A reconstruction procedure as described for severe insertional tendinopathy is required.

This is an overview of tibialis anterior pathology and is not all inclusive. If you have any questions regarding this please contact Mr. Curry's rooms on **(03) 9928 6560**