Plantar Plate Tear

Plantar plate tears are a common cause of pain on the ball of the foot.

**What is the plantar plate?**
The plantar plate is a ligamentous structure which lies beneath the metatarsophalangeal joints of the lesser toes. This supports the joints during walking and activity.

**How does the plantar plate tear?**
The plantar plate usually tears at its insertion to the proximal phalanx. It can tear with a trauma but more commonly it tears in association with degeneration. The second toe is the most commonly affected.

**What are the symptoms of a tear?**
- Pain beneath the metatarsal head.
- Deformity of the toe either clawing or splaying of the toes due to the loss of the supporting function of the plate.
- Rubbing over the toe due to deformity
- Pain and swelling over the top of the metatarsophalangeal joint due to inflammation.
- Numbness in the web space.

**How is the diagnosis made?**
- History and examination is the most important and imaging is confirmatory
- Xrays
- Ultrasound or MRI scanning

**Will the tear heal on its own?**
The tear often occurs in degenerate tissue and is unlikely to heal. The pain may subside over 6 months. If a deformity of the toe has developed this will not correct.

**What are the non operative treatments?**
- Simple pain relief
- Activity modification
- Shoe modification – deep toe box
- Orthotics- Metatarsal dome or bar
- Toe splint
What is the surgical treatment?
Surgery consists of repairing the tear back down to the proximal phalanx with sutures. This requires an incision on the top of the foot. The metatarsal bone is cut (Weil osteotomy) to allow exposure and reduce the soft tissue tension. This is fixed with a screw after the plate has been repaired. Additional surgery to fuse the toe may be required if a fixed hammer toe deformity is present.

How long will I be off work?
This is dependent upon your occupation
- Seated job 3-4 weeks
- Standing job 6-8 weeks
- Heavy lifting job 8-12 weeks

When can I drive?
If you have a manual car you will be unable to drive whilst in the post op shoe.
If you have an automatic car you can drive after 2 weeks if you have your left foot corrected and whilst in the post op shoe if your right foot has been corrected.

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

Specific risks for plantar plate surgery
- Stiffness
- Recurrence of deformity
- Under or overcorrection of the toe
- Osteotomy not healing

This information is an overview of the management of plantar plate tears and is not all inclusive.

If you have any questions regarding this please contact Mr. Curry’s rooms on (03) 9928 6188

What does the rehabilitation involve?
- You are in hospital 1 night
- For the first 2 weeks you should keep your feet elevated as much as possible to minimize swelling
- You are able to begin weightbearing immediately in a stiff soled shoe. This shoe is to be worn for 4-6 weeks.
- Physiotherapy begins at 2 weeks to optimise the movement in the toe and to prevent scarring. Taping may be required.
- By 4-6 weeks you can begin wearing wide or open shoes and should be comfortable walking around your house.
- By 3 months you should be back to most activities and wearing your normal shoes.
- Swelling can take up to 6 months to resolve.

Recovery times may be longer if additional surgery is performed.

Will the operation be painful?
Your operation will usually be done under general anaesthetic.
To provide ongoing pain relief your anaesthetist will perform a nerve block whilst you are asleep which numbs the foot for 8-16 hours. So when you wake up you will have minimal pain.
As the block wears off you will be given oral pain relief.