<table>
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<th><strong>40</strong></th>
<th><strong>TOPIC</strong></th>
<th><strong>Plantar Fibroma</strong></th>
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<td><strong>PROCEDURE</strong></td>
<td><strong>Excision of Plantar Fibroma</strong></td>
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**AIMS OF SURGERY**
Removal of the lump & associated section of plantar fascia

**SPECIAL NOTE**
Where treatment is required for very painful plantar fibroma no clear standard treatment exists. The usual advice that surgery should not be undertaken until the level of discomfort is significant, and has been present for several months and has not been sufficiently helped by alternatives is especially relevant. This is because when plantar fibroma surgery fails (i.e. the lesion grows back) it could be worse than before and the chances of repeat surgery helping are very poor.

**SPECIFIC RISKS OF THIS OPERATION**
- Recurrence – published studies vary from a 50% to a 15% recurrence rate. Our own Dept audit of outcomes shows that of 11 patients over the last 8 years, 10 patients have been completely satisfied (including in one case reporting a small regrowth). However in addition there has been one poor result (in which the patient was not satisfied with the outcome). In this case a new and larger fibroma appeared following removal of the original fibroma. This patient now wishes the surgery had not taken place.
- Thickened scar and/or tender scar - may reduce over 12 months
- Areas of numbness - may reduce over 12 months
- Increased flattening of foot and mid-arch pain

**OVERVIEW**

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<tr>
<th><strong>Operation time</strong></th>
<th>Usually between 30 - 40 minutes</th>
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<tr>
<td><strong>Incision placement</strong></td>
<td>Usually under the arch to one side of the plantar fibroma lump</td>
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<td><strong>Stitches</strong></td>
<td>The reactive nature of plantar fibroma means non-absorbable stitches are used</td>
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<td><strong>Fixation</strong></td>
<td>Not required</td>
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<tr>
<td><strong>Will I have plaster?</strong></td>
<td>This not normally necessary. If your particular operation requires a plaster we will let you know in advance</td>
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<tr>
<td><strong>Is this a Day Procedure?</strong></td>
<td>Yes, you can usually go home the same day (you will usually be admitted for half a day)</td>
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<td><strong>Estimated time off work</strong></td>
<td>Non-manual work approximately 2-4 weeks</td>
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**INDICATIONS FOR THE PROCEDURE**
Plantar fibromatosis may not cause any symptoms apart from being aware of a lump in the sole of the foot. In these cases no treatment is required. However, the feeling of a mass in the foot, difficulty fitting in shoes & pain with weight bearing often affect patients’ ability to stand/walk. The reason for considering treatment will usually be because a nodule is particularly large and causing pain due to its bulk or because it causes pain by compression of an adjacent nerve.

**ALTERNATIVE TREATMENTS**
1. Careful choice of shoes (to increase cushioning and depth in the sole and arch area)
2. Padding the area of the lump (to reduce pressure, if there is any direct pressure on the lump).
3. Foot supports (orthoses) may help reduce plantar fascia ligament strain (where the foot is flattening on weightbearing) and sometimes this may cause the fibroma to shrink in size.
4. Calf stretch exercises may help (similar to item (3), particularly where orthoses are to be used).
5. Cortisone injection (if cause of the pain is due to irritation of an adjacent nerve). Injections are however of little value otherwise. Some studies suggest they may even stimulate the mass to enlarge or spread.

**GENERAL RISKS OF SURGERY**
The anaesthetic options and general risks of foot surgery are outlined in the Generic Pre-operative Information Booklet for Patients with which you will have already been provided.

**MORE INFO BY:**
1. Speaking with your consultant or one of the clinical team
2. Reading the information provided
3. Looking at our Department’s NHS Choices information or the Faculty of Surgery website
What is Plantar Fibroma?
Plantar fibromatosis is an uncommon cause of foot pain. A plantar fibroma is a lump on the plantar fascia. The plantar fascia is a thick strong ligament-like band extending from the heel bone to the base of the toes. It acts like a thick springy band supporting the arch a bit like the string of a longbow. The cause of plantar fibroma, as with many tumours; is unknown, although trauma may be one cause. Diagnosis is made by clinical exam. Biopsy of the mass is not recommended as the act of biopsy may cause the fibroma to enlarge.

The term plantar fibromatosis (PF) used for 3 different conditions:
1. a plantar equivalent of Dupuytren’s contracture named Ledderhose disease and is seen in middle-aged and elderly people, is typically bilateral and progresses slowly but not indefinitely, it consists of one or more small, asymptomatic, round or flattened, hard nodules that are generally located on the medial side of the sole of the foot.
2. a more uncommon plantar superficial fibromatosis that, unlike deep fibromatosis generally has a less aggressive and recurrent tendency,
3. an extremely rare form which is associated with Proteus syndrome (a rare congenital condition).

The Operation
In very few cases surgery might be necessary and only when your symptoms are severe (see “indications for the procedure” overleaf. The operation is usually performed under a local anaesthetic, usually around the ankle or behind the knee. Most patients find this to be more comfortable than a dental injection.

Surgical treatment consists of excision of the mass and removal of a section of the adjacent “normal” plantar fascia. The reason for removing the section of the plantar fascia is because many studies have shown that simple excision of the mass (i.e. without removal of the associated fascia) generally results in recurrence of the mass. The foot is then placed in a firm compression dressing - protected weight bearing in a post-op shoe/boot.

Although the operation is relatively short, you will be in the Day surgery Unit for longer. You must have a competent adult at home for the first day and night after surgery. This allows us to be sure you will be safe for the first night.

First 2-4 days
- Is worse time for pain but you will be given painkillers to help. You must rest completely for 2-4 days.
- You will be able to stand and take weight carefully through your other leg using the crutches after the operation, but you must rest, with your feet up, as much as possible.
- You should restrict your walking to going to the bathroom and when getting about use your crutches in the way you will have been shown.

3 – 5 days and then 14 days after surgery
- You will need to attend for your foot to be checked and re-dressed and you will be shown exercises.
- You may start to do a little more within pain limits. Pain means you are doing too much.

3 weeks after surgery
- You must attend again for the sutures to be removed from the sole of your foot.
- You will not need a bandage, probably will no longer need the crutches and can get the foot wet providing the wound has healed satisfactorily.
- Many patients return to shoes after 3 weeks although this may take longer (6-8 weeks).

Between 3-8 weeks after surgery
- The foot starts to return to normal and you can return to shoes.
- The foot may still be quite swollen especially at the end of the day.
- You may return to work but may need longer if you have an active job
- You may drive again if you can perform an emergency stop (check with your insurance company before driving again).
- Whilst normal activity will be resumed, sport should be avoided.

Between 8-12 weeks after surgery
- The foot should continue to improve and begin to feel normal again.
- There will be less swelling.
- Sport can be considered after 3 months depending on your recovery.

Six months after surgery
- You will have a final review between 3- 6 months following surgery.
- The swelling should now be slight and you should be getting the full benefit of surgery.

Twelve months after surgery
- The foot has stopped improving with all healing complete.

Please note; if a complication arises, recovery may be delayed.