

Patient information

Proximal Interphalangeal (PIP) joint fusion for correction of hammer toe deformity

Trauma and Orthopaedics

Your consultant / doctor has advised you to undergo toe straightening surgery to correct your hammer toe deformity / deformities.

What is a Proximal Interphalangeal (PIP) joint fusion?

A hammer toe deformity occurs when the first toe joint of the lesser toe(s) becomes bent up in a curved position, causing limited function and toe pain, especially when in closed shoes. When conservative measures are no longer effective, such as adapted shoe wear or pressure-relieving digital silicone toe protectors, PIP joint fusion surgery may be an option to help relieve pain, correct toe deformity, improve your mobility and function. This surgery is normally carried out as a day case.

What are the benefits and aims of having PIP joint fusion surgery?

The aim of the surgery is to help reduce pain and improve function by fusing (fixing) the affected toe joint in a straight position, making your shoe wear more comfortable and preventing direct rubbing over the joint itself. The surgery can be carried out under local anaesthetic or general anaesthetic, depending on the outcome of your pre-operative assessment, and the opinion of your anaesthetist.

How is the surgery carried out?

An incision (cut) is made over the affected joint, which is then prepared so that two surfaces of bone can be joined (fixed) together either using a **temporary wire**, or a **special internal surgical implant**.

Choice of fixation device depends on your surgeon's preference and also the gauge (size) of your toe bones. If your bones are too narrow, then an internal wire is likely to be required.

This protrudes slightly from the end of your toe, which acts as a temporary splint and is kept in place for around six weeks. The wire maintains the position of your corrected toe during the healing process and is usually removed at your six-week clinic appointment, following a check X-ray.

If an internal surgical device is used, then this stays in and there is usually no need to remove it. You will be provided with a stiff-soled sandal and this needs to be worn, as part of your treatment, every time you put your foot to the floor. The shoe should be slightly

longer than your foot as this provides added protection in case you knock your foot accidentally.

What are the risks of having PIP joint fusion surgery?

Following your surgery, there is a risk of wound infection and delayed wound healing. If you have a **temporary wire**, then there is a risk that this could become infected and may need to be removed sooner than originally planned (usual duration the wire is in place for is six weeks). The wire acts as a toe splint and if it needs to be removed at an earlier stage, your toe may not heal in the intended newly corrected position after your surgery.

It is therefore important that you keep your wire well- protected, avoid knocking it and do not allow it to become wet accidentally.

We do not recommend plastic bags placed over your bandages to have showers, as water **always** gets inside the bag without you being aware.

If you are able, you can have a bath with your leg on the side of the bath, or if not, you can have a wash down at the sink.

Alternatively, you may wish to purchase a special waterproof cast cover. This consists of a specially designed heavy duty plastic cover with a water-tight seal (please read the manufacturer's instructions carefully before applying).

Your Specialist Nurse (will provide a limbo leaflet on day of surgery) or your local pharmacy will be able to discuss cast covers they have available, or you may wish to carry out a search on the internet (N.B cast covers come in different lengths and are made by various companies).

If you have an **internal surgical implant**, which is used to hold the two bone surfaces of the toe together, there is a small chance that it may loosen or fail. This is very rare but should this happen and begin to cause you pain, you may require further surgery to remove the device.

Depending on your wound healing, you should be able to begin showering or bathing following your first post-operative wound clinic appointment.

You are likely to require your stiff-soled sandal for six to eight weeks, depending on your consultant's preferred practice, before transferring into your own stiff-soled footwear.

There is a risk of damage to the small nerves around the operated area during PIP joint fusion surgery, which may result in numbness and / or painful scarring. There is also a risk that you do not produce enough bone and if you are a smoker we strongly advise you to stop smoking at least one week before your surgery and for up to three months post-operatively. Both wound and bone healing are affected even if you smoke one cigarette.

Are there any alternatives available?

If you decide not to proceed with surgery, your specialist may advise you to continue conservative treatment i.e. special orthotics such as silicone toe covers and / or roomy accommodative footwear, to help control your symptoms.

What will happen if I decide not to have treatment?

If you decide not to receive treatment, it is likely that your symptoms and condition will continue to deteriorate. What sort of anaesthetic will be given to me? You will be given a general anaesthetic. General anaesthesia is drug-induced unconsciousness: it is always provided by an anaesthetist, who is a doctor with specialist training.

Unfortunately, general anaesthesia can cause side effects and complications. Side effects are common but are usually shortlived: they include nausea, confusion and pain.

Complications are very rare, but can cause lasting injury: they include awareness, paralysis and death.

There is a risk of damage to teeth, particularly caps or crowns and veneers. Your anaesthetist will take every care, but occasionally damage can occur.

The risks of anaesthesia and surgery are lower for those who are undergoing minor surgery, and who are young, fit, active and well.

For more information, please ask for a copy of the leaflet "You and Your Anaesthetic" (PIF 344). You will be given an opportunity to discuss anaesthetic options and risks with your anaesthetist before your surgery. **If you are worried about any of these risks, please speak to your consultant or a member of their team.**

Getting ready for your operation

You will usually be seen in the pre-operative clinic before you are admitted to hospital. Here you will have blood tests, and sometimes a heart trace or a chest X-ray. You will be assessed to see if you are fit for the anaesthetic.

The staff will ask routine questions about your health, the medicine you take now and any allergies you may have. The staff will give you clear instructions regarding which medication to take. They will also discuss any medication that needs to stop before your operation and when to stop.

You will be given instructions on eating and drinking before your operation.

You will be able to discuss the operation with a doctor. You will be asked to sign a consent form to say that you understand the procedure, and what the operation involves. The day of your operation

You will come into hospital on the day of your operation.

Please leave all cash and valuables at home. If you need to bring valuables into hospital, these can be sent to General Office for safekeeping. General Office is open between 8.30am and 4.30pm Monday to Friday. Therefore, if you are discharged outside these times we will not be able to return your property until General Office is open. The Trust does not accept responsibility for items not handed in for safekeeping.

Please bring any medication you take into hospital with you.

Please bring in toiletries, nightwear and towels.

You will be asked to remove jewellery - plain band rings can be worn but they will be taped. Please leave body piercings at home. False nails and nail polish will also need to be removed if worn.

If you are on regular medication, you will be told to take this if necessary.

You will be asked to put on a gown and disposable underwear.

A bracelet with your personal details will be attached to your wrist.

You may be prescribed some medication to take before your operation by the anaesthetist. A member of the nursing staff will give this to you.

A nurse and porters will take you to the operating theatre.

Your dentures, glasses or hearing aid can stay with you on your journey to the operating theatre.

When you arrive in the theatre area, the ward nurse will leave you, and you will be asked to put on a disposable hat.

You will then be taken to the anaesthetic room, and a member of theatre staff will check your details with you (at Broadgreen Hospital there is a slight difference in the way you will be received in theatre due to the different theatre layout).

What should I expect after my operation?

After your operation you will be kept in the theatre recovery room before being transferred to the ward.

A nurse will check your pulse, blood pressure, and breathing rate regularly. It is important that if you feel any pain, you must tell the nursing staff, who can give you painkillers to help.

The nursing staff will also advise you when you can start taking sips of water. Anaesthetics can make some people sick. If you feel sick, we advise you not to drink until this feeling has passed. The nursing staff may offer you an injection to help this sick feeling go away.

The first time you get out of bed, please make sure you ask a nurse to be with you. This is in case you feel dizzy. You will also need to be fitted with a stiff-soled sandal before you are able to put your foot to the floor.

You will have a bandage in place, applied in theatre after your surgery. If you have a wire, this is normally covered with Elastoplast tape (fabric plaster). If you are allergic to any types of plasters, tape or dressings please discuss this with your surgeon pre-operatively.

Post-operative swelling can be minimised by ensuring that your leg is raised so that the level of your heel is higher than the level of your hip.

You will need to carry out frequent knee and ankle exercises to help prevent you from developing a blood clot (DVT).

You may require a course of blood thinning injections (heparin based) to help to prevent blood clot formation while your mobility is reduced post-surgery. You, or a close relative, will be taught how to administer these injections and a sharps-box will be provided to ensure safe sharp disposal at home.

The physiotherapist will assess your ability to walk safely with the aid of crutches, with your sandal in place, so that you do not use your forefoot to "push-off" (step to gait).

Going Home

It is expected that you can be discharged home on the same day as your surgery, once you have recovered from the anaesthetic, are comfortable and safely mobilising with crutches. The physiotherapist will also instruct you on how to climb the stairs safely.

Discharge Information Pain

relief and medication

The nursing staff will advise you about painkillers before you leave the hospital. Please tell the nurses what painkilling tablets you have at home.

Your wound

You will need to keep your bandages dry and undisturbed to help prevent infection and you will also need to continue to highly elevate your foot on sitting (above the level of your hip) to prevent increased foot / toe swelling.

Your wound will need to be reviewed at about ten to fourteen days post-surgery and any sutures will need to be removed. If you have a temporary wire, then you normally need to attend the dressing clinic two weekly for wire care and assessment. If you have any problems or concerns before your appointment, please contact the **specialist nurse on the telephone number on the last page of this leaflet**. The numbers for the foot and ankle secretaries have also been provided for you to leave your name and contact number, in case the specialist nurse is unavailable or busy.

Getting back to normal

Remember that you have just had an operation. It is normal to feel more tired than usual for a few days afterwards. You can mobilise around regularly with your stiff-soled sandal in place, with the aid of crutches. It is important to keep mobile but not to overdo things. Please avoid prolonged walking (more than five minutes at a time) and ensure that you elevate your foot highly when you sit, in between your short walks. This will not only help to reduce swelling but will also help to reduce your pain level.

Returning to work

You can self-certify for the first seven days of sickness. Before you are discharged a medical certificate will be provided and any further notes you require can be provided when you attend out-patient clinic. The period of sick leave needed depends on your occupation.

Further Appointments

You will be provided with an out-patient appointment around fourteen days post-operatively, when you will have your bandages and dressings removed for the first time. Any sutures will be removed and the wire(s) if present, will be cleansed, checked and recovered. Further appointments will be required in two to four weeks if you have a wire(s) or four weeks if you have internal surgical implant (s). A check X-ray is carried six weeks after your operation.

Feedback

Your feedback is important to us and helps us influence care in the future.

Following your discharge from hospital or attendance at your outpatient appointment you will receive a text asking if you would recommend our service to others. Please take the time to text back, you will not be charged for the text and can opt out at any point. Your co-operation is greatly appreciated.

Further information

Orthopaedic Specialist

Nurses Sharon Moore and

Gaby Jones

Tel: 0151 282 6471 or mobile number 07785703726

Foot and Ankle secretaries Tel: 0151 282 6746/ 6813/ 5579

Author: Trauma and Orthopaedics

Review date: January 2028

All Trust approved information is available on request in alternative formats, including other languages, easy read, large print, audio, Braille, moon and electronically.

يمكن توفير جميع المعلومات المتعلقة بالمرضى الموافق عليهم من قبل انتمان المستشفى عند الطلب بصيغ أخرى، بما في ذلك لغات أخرى وبطرق تسهل قراءتها وبالحروف الطباعية الكبيرة وبالصوت وبطريقة برايل للمكفوفين وبطريقة مون والإلكترونية.

所有經信托基金批准的患者資訊均可以其它格式提供，包括其它語言、易讀閱讀軟件、大字

體、音頻、盲文、穆恩體 (Moon) 盲文和電子格式，敬請索取。

در صورت تمایل می‌توانید کلیه اطلاعات تصویب شده توسط اتحادیه در رابطه با بیماران را به اشکال مختلف در دسترس داشته باشید، از جمله به زبانهای دیگر، به زبان ساده، چاپ درشت، صوت، خط مخصوص کوران، مون و بصورت روی خطی موجود است.

زانیاری پیوندیدار بهو نه‌خوشانه‌ی له‌لایهن تراسته‌وه په‌سمند کراون، نه‌گهر داوا بکریټ له فوړماته‌کانی تردا بریتی له زمانه‌کانی تر، نیزى رید (هاسان خویندنه‌وه)، چاپی گه‌وره، شریټی دهنګ، هیلی موون و نلټیکټرونیکی هییه.

所有经信托基金批准的患者信息均可以其它格式提供，包括其它语言、易读阅读软件、大字