# **Broström Operation**

# What is Broström?

The Broström operation is a repair of damaged ligaments on the outer ("lateral") side of the ankle.

# Why would it be done?

If your ankle is truly unstable and there is nothing else the matter, the operation is carried out to repair the damage to the ligament. This is the Broström operation.

# What does it involve?

A cut is made over the outer side of the ankle. The remains of the ligament are found. Small grooves are made in the bone on the outer side of the ankle (the "lateral malleolus"). Small screws are placed in the bone and stitches attached to these screws are used to fasten the ligaments back in place. The tissues on the outer side of the ankle are then stitched to the ligament to support it. The skin is closed, usually with a dissolving stitch buried under the skin. A plaster is applied to the leg.

Occasionally the ligament is so badly damaged, or the ends are so scarred, that it cannot be repaired. In that case, the ligament would be replaced with a piece of tendon from the outside of your ankle. The tendon used is the "peroneus brevis" which runs down the back of the ankle on the outer side and over the outer side of the heel, helping to pull the foot upwards and out. Only half the tendon is used - the other half is left attached and can do the work of the whole tendon. The cut for this is longer and a second cut may be needed higher up the leg to get the tendon free. The free piece of tendon is attached to the bone with stitches tied through small screws in the bones where your ligaments normally run. The skin is closed, usually with a dissolving stitch buried under the skin. A plaster is applied to the leg.

It is not usual to have to change from a Broström operation to a tendon operation, but it cannot always be predicted, and you should be prepared for the possibility.

The main difference is that a tendon operation may be "tighter" and a little stiffer, and in the long term the ankle may ache more. However, it is a very strong repair.

# Can it be done as a day case operation?

If you are otherwise fit, and there is someone who can collect you afterwards and stay with you overnight, the operation can be done as a day case. This means that you are admitted to hospital, operated on and discharged home on the same day.

Some people find that they need to stay in hospital the night after surgery because the ankle is painful and they need strong painkillers. Your hospital stay will be discussed and arranged in the clinic when surgery is offered.

# Will I have to go to sleep (general anaesthetic)?

The operation is usually done under general anaesthetic (asleep). In addition, local anaesthetic may be injected into your leg or foot while you are asleep to reduce the pain after the operation even if you go to sleep for the surgery. You will also be given pain-killing tablets as required. Discussion with your anaesthetist on the morning of your surgery will confirm this.

# Will I have a plaster on afterwards?

A plaster cast of your ankle and under your foot will be applied while you are asleep.

## What will happen afterwards?

You can go home when comfortable and safe.

You will be seen in the clinic 10 to 14 days after your operation. The plaster will be changed, and the wound inspected. A new plaster will be applied. You can walk fully on this plaster once it is dry.

Another clinic appointment will be made for three weeks later. At this time the plaster will be removed and the ankle examined. If your ankle is healing well, the plaster will be removed and you will be given a lightweight ankle brace to wear. You can walk with your full weight on this. Physiotherapy will be arranged to start getting your ankle going again. You will wear the brace for four to six weeks.

You will go through another full course of physiotherapy to make your ankle strong and flexible, to get back peroneal muscle strength and to retrain the fine nerve endings in your ankle to give the right signals to the muscles around them. This will last for several months.

## How soon can I...

#### Walk on the foot?

You can walk on your plaster when it is dry. You can walk fully on the foot as soon as it comes out of plaster, wearing your ankle brace.

#### Go back to work?

If your ankle is comfortable, you can work in a plaster and sit with your foot up most of the time (basically in a desk job); you could go back to work within a few days of surgery. On the other hand, if you do a heavy manual job you may need two or three months off work. How long you are off will depend on where your job fits between these two extremes.

#### Drive?

If you have your left foot operated on and have an automatic car you can drive within a few days of the operation, when your foot is comfortable enough. Otherwise you will have to wait until the ankle is strong and flexible enough to work the pedals, especially in an emergency situation. This will probably not be for six to eight weeks after surgery.

When you return to driving you need to take it gradually at first and drive only short distances. Also remember that if you drive before you can stop or manoeuvre in an emergency your insurance will not cover you in the event of an accident.

#### Play sport?

Once you are into your ankle brace you can gradually increase your level of activity **under the guidance of your physiotherapist.** Once you can walk comfortably you can start running, swimming and cycling, increasing the distance covered gradually. Once you can run comfortably you can do some turning and jumping. As this recovers you can go back to low-impact, non-contact sports and finally to full contact sports. It is common to take six to eight months to return to sports such as football or rugby.

# What can go wrong?

The repair may be:

- too tight: the ankle feels stiff and may not recover flexibility. Over a period of some years the ankle may develop aching pain and in some cases arthritis.
- too loose: the ankle still feels lax and gives way. Most people still find it to be much better than before but a few (about 5%) need to be re-operated on.

With the Broström procedure it is commoner to be too loose than too tight.

The ankle may continue to give way even with a good repair which is not loose. This is because the small nerve endings in the ankle are not working well, the peroneal muscles have not recovered their strength or the Achilles tendon is tight. Physiotherapy usually improves this, but a few people keep wearing an ankle brace.

In a few cases the wound is slow to heal or develops a minor infection. This usually settles with dressings and/or antibiotics.

The nerves to the top and outer side of the foot run close to the ankle where the operation is done. In about 10% of people, they are stretched or small nerve branches are cut. This produces a numb, sometimes tingly, occasionally painful area over the top or outer side of the foot. In many people this gets better over six to eight weeks, but in about 50% of those affected it does not get better.

# How can I prepare for surgery?

It is important to prepare for an operation to reduce the risks of complications. You should stop smoking, do some exercise, eat healthily and prepare for the phase after surgery. Fruit, vegetables and protein help wound healing. There is information about how to do prepare at: <u>https://www.cpoc.org.uk/patients</u>.

# Consent

Although you consent for this treatment, you may at any time after that withdraw such consent. Please discuss this with your medical team.

# Important information

The information in this leaflet is for guidance purposes only and is not provided to replace professional clinical advice from a qualified practitioner.

It is important to prepare for an operation to reduce the risks of complications. There is information about how to do this at: https://www.cpoc.org.uk/patients.

### Your comments

We are always interested to hear your views about our leaflets. If you have any comments, please contact the patient experience team on 0300 131 4784 or <u>esh-</u> <u>tr.patientexperience@nhs.net</u>.

# Hand hygiene

We are committed to maintaining a clean, safe environment. Hand hygiene is very important in controlling infection. Alcohol gel is widely available at the patient bedside for staff use and at the entrance of each clinical area for visitors to clean their hands before and after entering.

# **Other formats**

If you require any of our leaflets in alternative formats, such as large print or alternative languages, please contact the Equality and Human Rights Department on 0300 131 4434 or <u>esh-tr.AccessibleInformation@nhs.net</u>.

After reading this information are there any questions you would like to ask? Please list below and ask your nurse, doctor or practitioner.

## Reference

The following clinicians have been consulted and agreed this patient information: Mr Henry Willmott, Consultant Orthopaedic Surgeon

The clinical specialty/unit that has agreed this patient information leaflet: Diagnostic, Anaesthetic and Surgery – Orthopaedic Surgery

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