Ultrasound Guided Nerve Blocks for Foot & Ankle Surgery

The purpose of this information leaflet is to explain what and how an Ultrasound Guided Nerve Block is and how it helps to control pain. It also provides information on what to be aware of and the Do’s and Don’ts on discharge home with one in situ.

Introduction

You have been scheduled to have surgery to your foot or ankle. As part of your anaesthetic we would suggest a nerve block. This will give you excellent postoperative pain relief. In fact it is so effective you just don’t feel your foot and can provide your sole anaesthetic technique. You may choose to be sedated (so you can sleep and don’t remember a thing), or if necessary have a General Anaesthetic.

Local anaesthetic nerve blocks

The foot and ankle are supplied by a number of different nerves, which carry both sensory fibres (touch and pain sensation) and motor fibres (to the muscles). By injecting local anaesthetic around these nerves, it is possible to ‘block’ these signals. In other words there will be a temporary numbness and weakness of the leg below the level of the block. Which nerves are blocked will be determined by the type of surgery you are having.

How long does the numbness and weakness last?

The length of time over which the block is effective is variable, but is usually in the region of 12 to 24 hours.
For certain types of more painful surgery we can place a small tube next to one of the nerves, which will deliver a continuous infusion of local anaesthetic. This is known as a continuous peripheral nerve block (CPNB). Your anaesthetist will be able to discuss this technique with you at the pre-operative visit.

On a personal note

Please feel free to bring in a personal stereo if you would like to listen to music during the operation.

What can I expect when the block is performed?

The block will usually be performed with you awake; if you are very anxious a small amount of sedation can be given. You may experience slight discomfort, but it will not be very painful. We perform the block with you awake because it is safer for you; if you get shooting pains, find the procedure very painful, or feel peculiar during the procedure you should tell the anaesthetist.

Under sterile conditions the nerves are located either in the back of the knee or around the ankle, often with ultrasound guidance. A needle is inserted and, when the tip is correctly positioned, a volume of local anaesthetic is deposited around the nerve.

If a CPNB is being performed you will wake up with a small (1mm wide) tube exiting from the skin just above your knee. This will be stuck down with waterproof dressings and connected to a balloon pump. The balloon pump is carried in a small waist pouch or ‘bum bag’ which we will provide.

What about later?

As the block wears off you may begin to feel more discomfort, although by this time a lot of the inflammation and swelling from the surgery should have subsided. Usually your pain will continue to be well controlled with simple painkillers such as paracetamol and ibuprofen (Nurofen™).

You may need to take some stronger painkillers such as Oramorph™ (morphine syrup). The requirements for these types of painkiller will vary from person to person.

If you have a CPNB, you will hopefully be pain free until the catheter is removed (2 to 3 days). Your anaesthetist will prescribe ‘rescue’ painkillers just in case the block stops working for any reason (usually from accidentally pulling out the catheter).

What are the benefits?

The primary benefit of choosing a ‘block’ as part of your anaesthetic is the provision of very effective post-operative pain relief. This will in turn significantly reduce the need for stronger morphine-like painkillers and their side-effects such as nausea, vomiting, itching, constipation, dizziness and urinary retention. You can also avoid the risks of a General Anaesthetic.
Other benefits include: faster recovery; less risk of blood clots (DVT); and earlier discharge from hospital.

If you are having a CPNB you will be able to go home on the day of surgery. This is obviously nicer for you, but also reduces the risk of developing hospital acquired infections (e.g. pneumonia).

**What are the risks?**

This is generally considered a very safe procedure but with all procedures there are risks involved.

The main risks are failure or incomplete block, bruising or bleeding at the injection site and numbness or tingling in the foot lasting a few days.

**More serious complications are rare:**

**Nerve Damage**

About 1 in 100 to 1 in 200 patients may notice numbness, tingling or weakness in their foot or ankle which persists for a few days to a few weeks. The risk of long-term nerve damage is very rare - probably in the region of about 1 per 10,000 to 15,000 procedures.

It is important to note that nerve injury can be caused by the surgery or your position on the operating table; whether or not a nerve block has been performed.

**Other rare complications**

Infection around the nerve. The risk of this is minimised by adhering to a scrupulously sterile insertion technique.

Very rarely fitting or life-threatening events can occur. Your anaesthetist can discuss this further with you if you wish.

**Aftercare Does and Don’ts**

**Do**

Look after your leg whilst it is numb – it can easily be damaged.

- Take regular simple painkillers even if you are pain free. You will need them working before the block wears off.
- Use your crutches
- Keep the foot & ankle elevated as discussed with surgeon.
Do Not

Try and walk without crutches whilst your leg is numb. You will fall over!

- Drive or use machinery
- Allow your leg to be anywhere it may get damaged e.g. next to a fire – you may not feel the heat!

We hope this leaflet has answered most of your questions, please feel free to ask the anaesthetist any further questions.

Helpline

Phone 01305 25(4502) or (4228). Alternatively, out of hours, call the hospital switchboard 01305 251150 and ask for bleep 209

Contact us if you have any of the following:

- Weakness or numbness persisting for more than 48 hours after the block (or after removal of catheter for CPNB)
- Numbness or tingling of the lips and face
- Agitation or confusion. (Alert your carer of these risks)