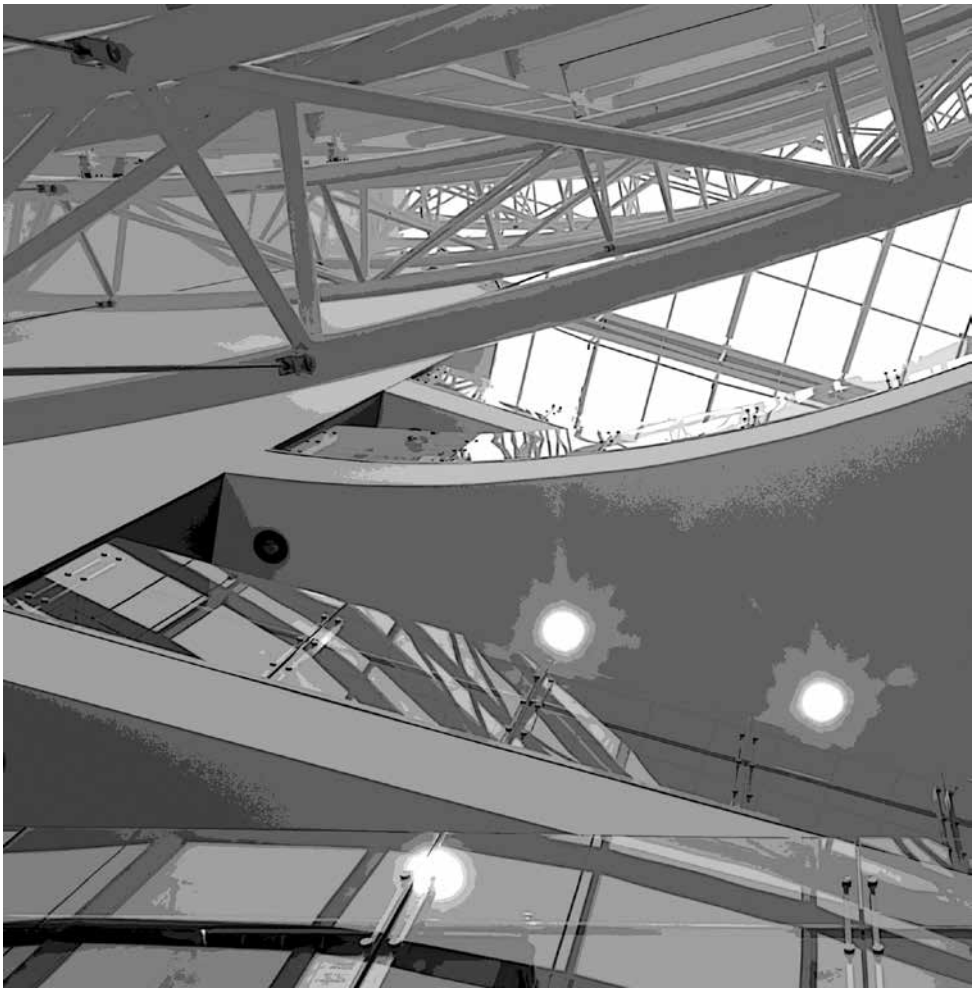
Oxford University Hospitals NHS
NHS Foundation Trust

Department of Neurosciences

Peripheral Nerve Stimulation for Neuropathic Pain

Information before your operation



We have seen you in clinic as you have had pain for a long period of time. You have been offered Peripheral Nerve Stimulation as a treatment for your pain.

This leaflet has been written to tell you about the treatment. It will give you the sort of information that you may need to help you decide whether a stimulator might be the right thing for you. If there is anything else you wish to know about this treatment, please contact us on the telephone numbers at the end of this leaflet.

What is neuropathic pain?

Neuropathic pain ('neuralgia') is a pain that comes from problems with signals from the nerves. There are various causes. It is different to pain that is due to an injury, burn, pressure, etc.

Traditional painkillers such as paracetamol, anti-inflammatories, codeine and morphine may help, but often do not help very much. However, neuropathic pain is often eased by antidepressant or anti-epileptic medicines – by an action that is separate to the way they treat depression and epilepsy.

Other pain relieving techniques are sometimes used if these are not effective, such as surgery or Peripheral Nerve Stimulation.

Peripheral Nerve Stimulation (PNS)

PNS works by sending small electrical impulses from an implant under your skin to the nerve responsible for your pain. It is powered by a small battery, which is implanted under your skin.

This stimulation helps to block the pain signals travelling to your brain. It can feel like a tingling sensation in the painful area, which may well help to reduce your pain. The amount it reduces pain by varies from person to person.

Before your admission to hospital

We will send you pain charts and health questionnaires to fill out. These charts give us a good insight into your pain. Please return them in the envelope provided (if they are not completed in clinic). You can either return them before you are admitted, or bring them with you when you come for the procedure.

About two to four weeks before your admission to hospital you may be asked to come to the Pre-admission Clinic. This is routine for Neurosurgical admissions. At this appointment you will be asked questions about your medical history and we will take some blood tests.

At this appointment you will also be given information about fasting before the procedure, what to bring with you and when to stop certain medications.

Your admission to hospital

You will normally be admitted on the day of surgery at 7.30am.

You will need to stay in hospital between 1 and 8 nights. The length of your stay depends on whether you have a full implant straight away or a trial period. If a trial period has been planned to assess the benefit of the stimulator, you will stay in hospital for at least 8 days.

The procedure

If you have read other information about PNS, it may have mentioned a trial period. Your consultant will decide whether or not you should have the trial first or can have the full implant straight away.

The procedure is performed under local anaesthetic (to make the area numb) with sedation (to make you sleepy).

The surgeon will place the electrodes under your skin, near to where the nerve is that is causing your pain. If you are undergoing a trial, the electrodes will be placed under the skin on your side and the electrode wires brought out onto your skin. When you have come round from the general anaesthetic, we can then test the stimulator, to see if it helps your pain. If the stimulation is successful, or if you are having the full procedure straight away without a trial, we will tunnel the wires to your abdomen (tummy), your chest wall, or the top of your buttock and implant the 'battery' or receiver.

After your surgery you will be given painkillers to help ease any soreness.

If you are having a trial period, we will set up your stimulator so that it targets your pain. We will also teach you how to use the patient controlled handset (programmer). This is used to turn the stimulator off and on, and up and down. You will also be given written instructions for this, to take home with you. During your stay in hospital we will programme the stimulator to give you the best pain relief possible.

If you are having a trial period, you will be seen every day on the ward by the nurse specialist or doctor. You will be asked to describe your pain relief so that we can adjust the settings, if required. At the end of the trial period you will be asked to complete an evaluation form. The team will then decide with you whether or not a full implant is in your best interests.

Risks

As with all types of surgery, there is a risk of complications.

These include:

- infection
- bleeding
- failure to relieve pain or an increase in pain
- no stimulation or irregular stimulation
- stimulation in the wrong area
- stimulator failure
- allergic reaction to implanted device (rare).

Success rates

The response to stimulation is different from person to person. Unfortunately, it is not successful for everyone.

Follow-up

We will keep in close contact with you once you are discharged, to monitor your progress.

If you have a non-rechargeable battery it will need to be replaced every two to five years. This will involve coming in to hospital for a day for an operation to change the battery. If the level of stimulation changes it may mean that there are problems with the electrode. This will need investigation and the electrode may need to be replaced.

If you have a rechargeable battery it only needs to be replaced between 9-10 years after you receive the implant.

How to contact us

We can be contacted on the numbers below if you have any questions.

Advanced Nurse Practitioners – Pain Neuromodulation

Tel: **01865 231 874**
(8.00am to 8.00pm, Monday to Friday)

or

Neuromodulation Secretary

Tel: **01865 572 466**
(8.00am to 5.00pm, Monday to Friday)
Email: neuromodulation.pain@ouh.nhs.uk

Departmental Address:

Department of Neurosciences
Level 3
West Wing
John Radcliffe Hospital
Headley Way
Headington
Oxford OX3 9DU

If you have a specific requirement, need an interpreter, a document in Easy Read, another language, large print, Braille or audio version, please call **01865 221 473** or email **PALS@ouh.nhs.uk**

Author: Liz Moir, Advanced Nurse Practitioner
November 2016
Review: November 2019
Oxford University Hospitals NHS Foundation Trust
Oxford OX3 9DU
www.ouh.nhs.uk/information

OMI 14136P