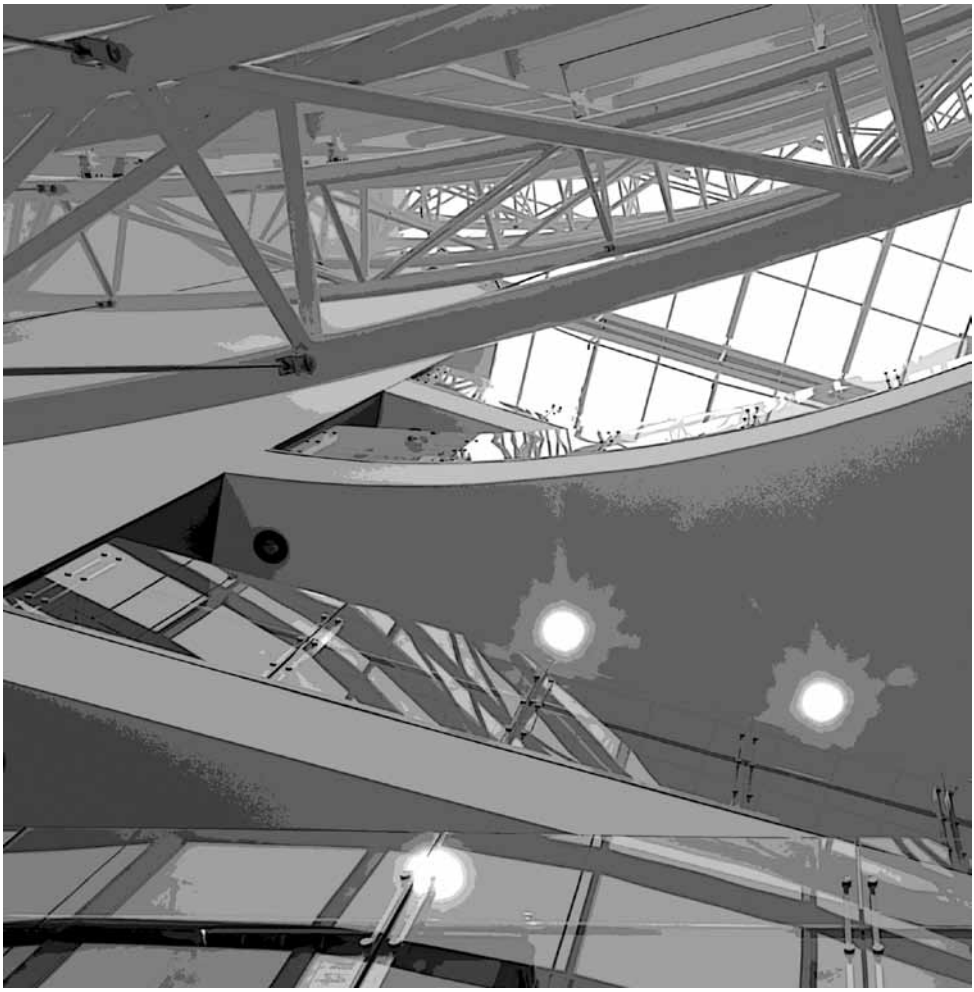
Oxford Radcliffe Hospitals NHS
NHS Trust

Department of Neurosciences

Spinal Cord Stimulation

Information before your operation



Introduction

We have seen you in clinic as you have had pain for a long period of time. Spinal cord stimulation has been offered to you as a treatment for your pain. This leaflet tells you about spinal cord stimulation. It gives you the sort of information that you might need in order to decide whether a stimulator might be the right thing for you. If there is anything else you wish to know about this treatment please do not hesitate to contact us (see contact numbers on page 5).

Spinal Cord Stimulation (SCS)

SCS works by sending small electrical impulses to your spinal cord. The stimulator has an electrode which lies over the spinal cord and is powered by an implantable battery in the abdomen. Stimulation helps to block the pain signals travelling to your brain. It can feel like a "tingling" feeling in the painful area, which may well help reduce your pain. The amount it reduces pain varies from person to person.

Before your admission to hospital

We will send you pain charts and questionnaires to fill out.

These charts give us a good insight into your pain. Please return them in the envelope provided before you are admitted, or bring them in with you on admission.

About 2 weeks before your admission to hospital you will be asked to attend a Pre-admissions Clinic. This is routine for all Neurosurgical admissions. At this appointment we will take a detailed medical history and some blood samples.

Your admission to hospital

You will normally be admitted the day before surgery. 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 be in hospital for at least 5-10 days.

The procedure

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

The procedure is performed under general anaesthetic (you will be asleep). The surgeon will place electrodes onto your spinal cord. If you are undergoing a trial, the electrodes are then tunnelled under the skin to your side and the electrode wires are outside the skin. We can then test the stimulator to see if it helps your pain. If successful, or if you are having the full procedure straight away, we tunnel the wires under the skin to your abdomen (tummy) or the top of your buttock and implant the 'battery' or receiver.

After your surgery you may be given a Patient Controlled Analgesia (PCA) pump. This will allow you to control your pain yourself. The nurses looking after you will show you how it works. Most patients use this for 24-48 hours after surgery. While you are still in hospital we will set up your stimulator so that it gives you pain relief.

During your stay in hospital you will be seen daily by the nurse specialist and doctor. The stimulator will be tested with you sitting, standing, walking and lying down. We will adjust the programmes over the course of the trial period. After the trial period we will assess your suitability for the full implant. We

actively encourage you to be as mobile as possible during your stay in hospital so that we can test the stimulator's effectiveness fully.

We will also teach you how to use the patient controller handset. You will be given instructions produced by the manufacturer to help you and you will take these home with you.

Complications

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

These include:

- infection
- bleeding
- failure to relieve pain or increase in pain
- no stimulation or intermittent stimulation
- headache
- allergic reaction
- stimulation in the wrong area
- stimulator failure
- paralysis – this is very rare.

Success rates

We have carried out this procedure in a total of around 150 patients. The response to stimulation is different from patient to patient. Unfortunately, it is not successful in all patients. It can be difficult to get the electrode in the correct position. 85% of the patients who have undergone this procedure have, on average, reduced their pain scores by 80%. This means that before surgery their average pain score was 10/10 and it reduced to an average of 2/10 with their stimulator.

Follow-up

We will keep in close contact with you once you are discharged to monitor your progress. If you have a fully implantable system (including the battery implanted), the battery will need to be replaced every three to five years. This will involve a short admission to hospital and an operation to change the battery. If stimulation changes it may indicate electrode problems. These will need investigation and possible replacement.

Questions or further information

We can be contacted on the numbers below if you have any questions or need any further information.

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If you need an interpreter or need a document in another language, large print, Braille or audio version, please call **01865 221473** or email **PALSJR@orh.nhs.uk**

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