

Pelvic Floor Service Sacral Nerve Stimulation

Introduction

The nerves that supply the muscles and organs of the pelvic floor are important in maintaining bladder and bowel control. Sacral nerve stimulation (SNS) is a treatment that modifies the nerve pathways between your brain and pelvic floor which are responsible for your bowel control. The treatment, which is funded by the NHS, can significantly improve bowel (and bladder) control problems.

Is it right for me?

SNS is considered when conservative (non-surgical) options, such as dietary changes, biofeedback, rectal irrigation or medication, have provided only limited or no benefit. You will be referred to a Consultant at a regional specialist centre that performs the procedure. All treatment and follow up will take place there. They will assess your suitability for treatment, discuss this with you and answer any questions.

The procedure is performed in two phases:

The test phase

- Allows your Specialist to assess how much benefit you are likely to get from SNS.

The implant phase

- If you have at least a 50% reduction in bowel symptoms during the test phase you will be offered permanent SNS surgery.

Test phase

Before and then during the test phase you will be asked to complete a 2 week bowel and symptom diary in order to assess how effective the treatment is likely to be.

The test phase is done as a day case procedure. You will be given either a general anaesthetic or sedation and a local anaesthetic. A fine wire is inserted near the sacral nerves in your lower back. This is connected to a small external controller which stimulates the pelvic nerves (similar to a pacemaker).

The test stimulator sends mild electrical pulses through the wire to your sacral nerves. The test period typically lasts around two weeks and you can continue many of your daily activities with caution.

You will be asked to complete a bowel diary to assess your bowel function during the test period. To avoid damaging the system or dislodging the wire you must avoid strenuous physical activities. You must not get the dressing, wire or test box wet so you will not be able to have a full bath or shower during the test phase.

You should be able to feel a sensation in your pelvis, often described as tingling or fluttering. If the sensation goes away you can turn up the dial on the test box until it can be felt again but is not uncomfortable. It is not essential however to feel the sensation for the device to be working.

Removing the temporary wire

You will be seen in clinic after two weeks to remove the wire and review your bowel diary. The wire is simply removed with very little discomfort and a small plaster is applied to the skin. You may now resume your normal activities.

What happens next?

Your Specialist will decide whether to proceed to offering you permanent SNS. You will be seen in the Outpatient Clinic to discuss this further.

Permanent SNS

This is usually a day procedure which is performed under a general anaesthetic.

As before, a fine wire is implanted under your skin into your lower back. A small cut is made in your buttock to insert the battery. A tunnel is made under the skin to connect the battery to the wire in your back. The battery provides power to the device which sends mild electrical signals to your sacral nerves. You will usually return to the Outpatient Clinic at the Specialist Centre after a few weeks when the wound has settled down to have the device switched on and programmed. You will be given a remote control for the implant and shown how to use it.

Two companies offer SNS. The Medtronic non-rechargeable battery lasts around seven years and is simply replaced by performing a small operation in your buttock. The alternative Axonics system has a battery which is recharged every 1-2 weeks thereby avoiding further surgery for at least 15 years.



Medtronic non- rechargeable battery



Axonics rechargeable battery

Risks, Benefits and Alternatives

Risks may include:

- Pain or numbness where the device is implanted
- Undesirable stimulation or sensations.
- Skin irritation or infection
- Technical device problems
- Movement of the electrode
- Adverse changes in bowel or bladder function

In most cases, these problems can be resolved.

Benefits and alternatives

SNS is a reversible treatment that offers several benefits. These include better control over your bowel function, freedom from fear and embarrassment and an improvement in your quality of life. Alternative options to SNS include dietary changes, medication or rectal irrigation. In severe cases complex reconstructive surgery or surgery to divert the stools (colostomy or ileostomy) may be considered.

Will it eliminate my symptoms?

The results of SNS vary from person to person. Whilst many people experience a significant benefit immediately and in the long term, this treatment option is not a cure for bladder or bowel problems. Symptoms will come back if the treatment is stopped for some time. You can experience urgency to go to the toilet for example if you have a tummy upset so you may need to take anti-diarrhoeal medication from time to time.

Follow up

You will be seen from time to time in the Outpatient Clinic where your procedure was carried out but you can contact your health professional at any time if you need your implant to be adjusted. You should also make contact if you notice your symptoms coming back so the implant can be checked.

Daily living

Following your surgery you will soon resume your regular activities and start enjoying freedom from your bowel symptoms. It is important to continue to be aware of what is happening with your implant and stay in touch with your health care professionals about any questions or concerns.

You will be given a remote control after your surgery which you will be shown how to use. Although you will usually not need use the remote regularly, it allows you to adjust slightly the intensity of stimulation and to turn your SNS ON or OFF.

Medical procedures and equipment

Tell medical staff about your SNS implant before you undergo tests or treatments. Most procedures and equipment will not affect or be affected by your neurostimulator. But, caution is needed with some equipment, such as magnetic resonance imaging (MRI), monitors and diathermy equipment. If in doubt switch your SNS off and seek advice.

Anti-theft devices

Make airport security staff aware about your device to avoid possible problems with airport screening systems. Airport screening systems or theft detectors in public department stores or banks can cause the neurostimulator to turn OFF or ON. They will not change your stimulation settings. Simply use your patient programmer to switch your neurostimulator back ON again. If you know you will need to pass through one of these devices you can switch off your SNS before going through and turn it back on afterwards.

Replacing the battery

The Medtronic battery is non-rechargeable so it will need to be replaced after around 5 to 7 years. If the battery is no longer working your symptoms are likely to reappear, but this is normal and there is no need to worry. You should consult your Specialist as soon as you feel a change in the stimulation (less or more intense, or different). They will check the battery and arrange to replace it if necessary with a small operation. Your remote control will also warn you if the neurostimulator battery is low.

The Axonics rechargeable battery is likely to continue working for at least 15 years. It can then be replaced with a small operation.

Contact details for further information

Pelvic Floor Nurse Specialist

Royal Shrewsbury Hospital

Telephone: 01743 261083 (24hr answerphone)

Consultant Colorectal Surgeons

Royal Shrewsbury Hospital

Telephone: 01743 261460 or 01743 492359 (secretaries)

Medtronic Ltd

Further information about SNS.

Website: www.medtronic.co.uk

Axonics Ltd

Further information about SNS.

Website: www.axonics.com

Further information is available from:

- **Patient Advise and Liaison Service (PALS)**

PALS will act on your behalf when handling patient and family concerns, they can also help you get support from other local or national agencies. PALS is a confidential service.

Royal Shrewsbury Hospital Tel: 0800 783 0057 or 01743 261691

Princess Royal Hospital Tel: 01952 282888

Other Sources of Information

- **The Pelvic Floor Society**

A national multi-professional body involved in supporting excellence in clinical practice, education and research, clinical standards, patient information and engagement in the commissioning of pelvic floor services.

Telephone: 020 7973 0307

Website: www.thepelvicfloorsociety.co.uk

- **Bladder and Bowel Foundation**

For more information about bladder and bowel conditions, treatment and support

Telephone: 0870 770 3246

Website: www.bladderandbowelfoundation.org

- **NHS 111**

A fast and easy way to get the right help, whatever the time. NHS 111 is available 24 hours a day, 365 days of the year.

Telephone: 111 (free from a landline or mobile)

Website: www.nhs.uk

- **Patient UK**

Provides leaflets on health and disease translated into 11 other languages as well as links to national support/self-help groups and a directory of UK health websites.

Website: www.patient.info

- **Self-Help UK**

This is a directory of self-help groups and charities.

Website: www.selfhelp.org.uk

Website: www.sath.nhs.uk

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