

Sacral Nerve Modulation

Anal incontinence can be a distressing condition. There are many causes; these can include damage to the muscles and or nerves around the anus. The commonest cause of such damage is childbirth, but anal incontinence affects men as well.

When there is clear damage to the anal sphincter muscle and a wide gap in the muscle the surgeon will often recommend an anal sphincter repair in the first instance. Where there isn't a big gap in the sphincter muscle and/or symptoms cannot be controlled with drugs and physiotherapy, sacral nerve modulation may be recommended. Patients will usually require anorectal physiology tests, endoanal ultrasound, video proctogram and transit studies to assess suitability for implantation.

What does the operation involve?

Sacral nerve modulation uses a small implanted device to send electrical impulses to nerves in the lower back. This alters the way the lower part of the rectum and anal sphincter muscles work.

The procedure is carried out in two phases. In the first part temporary wire is inserted into the lower back. This is normally carried out under a short general anaesthetic. The procedure takes around 30 minutes. The wire is connected to an external stimulator. The patient keeps the temporary electrode for a period of 2-3 weeks. They keep a diary during this period and if the test phase has brought about a significant improvement in symptoms then the temporary wire is removed and the patient moves on to the second phase and insertion of the permanent implant. About 70% of patients will receive a permanent implant.

In the second phase a different type of wire is inserted with several electrodes and some tiny fins to stop it moving. This wire is then connected to the implanted stimulator, which is placed under the skin of the buttock. This second procedure is usually carried out under a general anaesthetic and takes around 40 minutes to complete.

What are the risks?

There are small risks associated with any operation. Pre-operative assessments are made of any heart or lung conditions, as well as any coexisting medical condition. Bleeding is very rare in this type of surgery, as are infections.

What happens after the operation?

Both procedures are carried out as a day case. Sacral nerve modulation doesn't usually cause much pain afterwards. Most patients will need only simple oral painkillers.

After the test wire has been placed it is important that the dressings are not disturbed. This means that patients cannot bath or shower until the wire is removed. The wire temporary wire can easily be removed in the out-patient clinic.

After the permanent wire has been placed, patients are seen for programming after around 2 weeks and further visits are usually required to fine-tune the device.