

Sacral Nerve Stimulation

Sacral Nerve Stimulation (SNS) is a novel therapy that may be able to help certain people who experience bladder and bowel problems. Where successful, the treatment can be a life changing therapy. SNS can help to restore normal bladder or bowel function and has been used to treat 200,000 worldwide. Approved initially over 20 years ago for bladder incontinence, it was noted to be effective in patients with bowel incontinence and has since been approved for treatment of bowel issues with great success. This therapy addresses the communication problem between the bladder/bowel and the brain that may be causing symptoms. It is performed in two stages, both under sedation as an outpatient where an initial trial of therapy is performed using an external stimulating device and if successful the stimulator is placed under the skin so that it is totally internal . Bowel management, specifically, is still an underdeveloped area of care across the US. At Virginia Surgery Associates, we are working hard to ensure that everyone has easy access to the right level of information and support, to ensure they are able to be assessed and prescribed the correct treatment for their individual needs.

What does Sacral Nerve Stimulation treat?

Sacral Nerve Stimulation can, in some cases, effectively treat fecal incontinence. It may also effectively treat overactive bladder, including the frequent, strong, and sudden urge to go to the toilet.

How do you know if it's right for you?

SNS is a therapy that is considered when conservative options (such as lifestyle and dietary changes, medication or biofeedback) have had limited or no success, or are too difficult to live with. A specialist doctor will assess each individual's suitability for the treatment. SNS is performed in two stages, the first is an evaluation/test phase and the next is the implant phase. The evaluation phase allows your doctor to assess whether or not your symptoms will be significantly reduced by SNS.

Before you take part in an evaluation, you will be asked to take a few weeks during your normal routine at home recording your toilet habits and symptoms, in a diary, to use as a base for future comparison.

Evaluation Phase

To evaluate SNS as a therapy, a thin temporary wire is inserted near the sacral nerves in your lower back, [near your tailbone] which control the bladder/bowel. The wire is then connected to a small discrete external device which

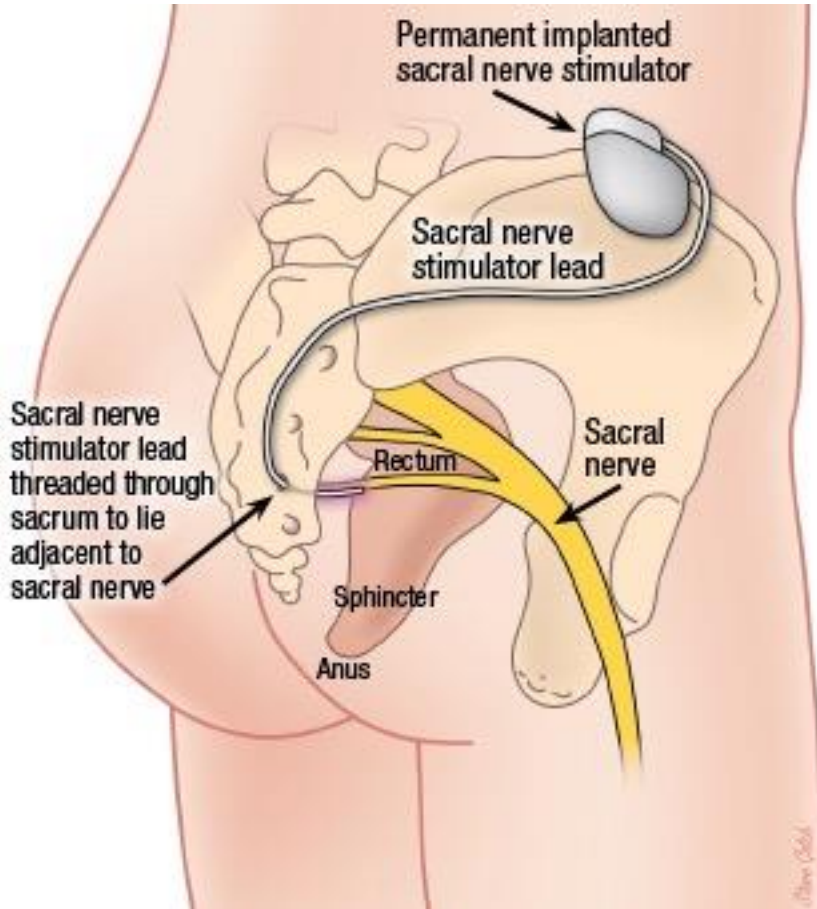
delivers stimulation to the nerves. This external device, houses a battery which is worn on a belt for the duration of the evaluation. The procedure normally takes less than an hour and is generally completed as an outpatient. After the temporary wire is inserted you'll go home and go about your daily life, continuing to record your toilet habits during this test in a new diary. After two weeks of the home evaluation, your doctor will explain and discuss the results with you. Several measures will be used to assess whether or not you will benefit from SNS. Depending on your symptoms, this may include recording the number of incontinence episodes before and after the test, quality of life assessments, and patient satisfaction.

Implant Phase

Following a positive evaluation, you may be offered an implanted device, called a Neurostimulator (similar to a pacemaker). The implant is usually placed just beneath the skin in the upper buttock. It's about the same size as a silver dollar coin. A thin lead is also implanted in the lower back and connected to the device, with the battery lasting approximately 5 years. Should your evaluation be unsuccessful (only about 10% of the time), the temporary wire will be removed in clinic and your specialist doctor will either consider repeating the test or discuss other options with you.

The science behind Sacral Nerve Stimulation

One way the brain controls our body's muscles and movements is through electrical messages, which are carried by nerves. These nerves have major routes with smaller pathways running off them. One major route runs from the brain, along the spinal cord and through the lower back called the sacral area. Here, nerve paths split off and go in different directions, some to the pelvic area. The muscles in the pelvic area, such as the pelvic floor, urethral sphincters, bladder and anal sphincter muscles are controlled by the brain through nerves that run from the sacral area. Our sensations, such as fullness in the bladder or rectum, are also relayed to the brain via these nerve routes. SNS helps to correct inappropriate, unwanted or even erroneous messages sent along these nerve pathways.



Photos below are the actual stimulator device

External incision and leads

