

Neurostimulation Trial and Implant

Trial and Implant

Neurostimulation Trial

In order to have a neurostimulation system implanted, you must first have a successful neurostimulation trial. The trial screening procedure—or test stimulation—consists of a short test stimulation period in the operating room and an evaluation period of several days at home. During the evaluation period, your doctor determines your response to neurostimulation and your level of pain relief. It also gives you an opportunity to experience the system and enables the doctor to assess your battery requirements.

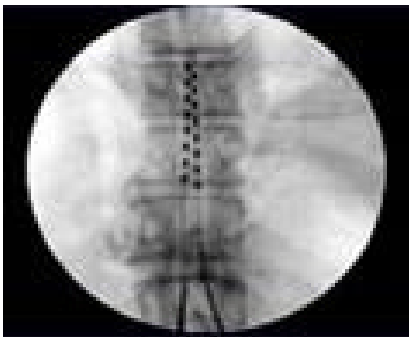
During the trial screening, your doctor will place a lead in your back to deliver electrical stimulation to the spinal cord. The lead placement is one of the keys to successful results with a neurostimulation system. Your involvement is very important to proper placement, so be sure to follow your doctor's instructions carefully.

Typically, you will receive a local anesthetic and mild sedatives to keep you comfortable during the procedure. After that, your doctor will place the lead in your back.

There are two types of neurostimulation trials: percutaneous and "cut-down." For the percutaneous trial, a needle is placed in your back. Through it, the test stimulation lead is inserted into the desired area of the spine. The end of the lead that remains on the outside of your body is secured to your back with surgical tape. After the trial period concludes (usually after several days), the lead will be removed. The percutaneous test stimulation is similar to an epidural nerve block, except that the lead will be inserted and left in your back during the trial.

For the cut-down trial stimulation, your doctor makes a surgical incision, implants the permanent lead, and closes the incision. If you qualify for implantation in the latter case, the permanent lead will stay in place but will be attached to the implanted neurostimulator.

After the lead is placed, your doctor will connect the lead wires to an external screener that allows your nurse or doctor to adjust your stimulation.



Here the electrodes have been placed for the trial through two needles.

Implant Procedure

If your neurostimulation trial is successful, you may be a candidate for implantation of a neurostimulation system.

The surgical procedure to implant the neurostimulation system may require a brief hospital stay. Before the surgery, you and your doctor will decide where to position the neurostimulator for your comfort. During the surgical procedure, an incision is made over the spine so that your doctor can place the lead and connect it to the extension. The extension is tunneled under the skin and connected to the neurostimulator. Your doctor will then form a pocket under your skin (usually in the abdominal area) that is large enough to hold the neurostimulator. Once the extension is connected to the neurostimulator, the incisions are closed and the surgery is complete.

