

Spinal cord stimulation uses an electrical current to send signals to the nerves that interfere with neurotransmitters. This procedure is intended for those who have chronic pain and have not been successful with other treatments.

#### **Conditions treated**

You may benefit from spinal cord stimulation if you suffer from:

- Complex Regional Pain Syndrome (CPRS)
- Peripheral neuropathy
- Phantom limb pain
- Sciatica
- Shingles
- Failed back surgery
- Chronic low back
- Chronic neck pain
- Cervical radiculopathy

#### **Duration**

Patient dependent

### How is it performed?

You will undergo a spinal cord stimulation trial. The trial requires a short, minimally invasive outpatient procedure. During the procedure, you will be positioned on your stomach. One or more leads are placed in the epidural space over the spinal cord. The lead(s) is (are) inserted using a small needle. The exact placement of the lead(s) depends upon the location of your pain.

When the leads are positioned in the best location, they are connected to an external device and activated.

- If your physician is using high frequency stimulation, you will not feel any sensation with activation.
- If your physician is using traditional stimulation, low-intensity electrical impulses will be programmed to replace your areas of intense pain with a more pleasant sensation known as paresthesia.

The spinal cord stimulation trial is typically done using a local anesthetic to numb the area where the leads are inserted. This allows you to be awake to answer questions when the trial stimulator is activated to help the physician determine how well the stimulator covers your pain pattern. Be honest with your physician, because this is the best time to change the position of lead(s) if needed. If high frequency stimulation is used, this step will be skipped.

When it is determined that the lead(s) will provide adequate stimulation in the areas that are normally painful, the leads are secured and a dressing is applied to cover the incision and the external part of the lead.

Your physician determines the length of the trial period; it will typically last 5-7 days. A longer trial may allow you to test how well the spinal cord stimulator is able to respond to the different types of pain you experience throughout the day and with different activities; however there may be an increased risk of infection for trials lasting more than 7 days. A shorter trial can be appropriate if your response is immediate and pain relief is dramatic, or long trials are contraindicated.



At the end of the trial, if you have 60% relief or more of your pain you may be scheduled for the implant.

**If the decision is made for implantation**, this will be done in an operating room with IV sedation or MAC anesthesia. The leads will be placed as in the trial.

- With traditional stimulation, you may be woken up to make sure the leads are covering your area of pain.
- With high frequency stimulation, this step is not necessary.

Once the leads are in place, a small incision will be made and the leads will be anchored. They will then be tunneled under the skin and another incision made to make the battery pocket. These incisions will be closed and you will go home the same day.

### Prior to the procedure

Prior to this procedure, you need to have a psychological evaluation to review your expectations for the spinal cord stimulator.

Once this is completed, you will be scheduled for the spinal cord stimulator trial (phase 1) that is approximately 5-7 days in length.

### What to expect after the procedure

If you have neck and arm pain, you must avoid any repetitive bending, extending or twisting of your neck.

If you have back or leg pain, you must avoid repetitive bending past 30 degrees, lifting or twisting

You must avoid twisting your upper body without also turning your lower body. Practice log rolling, especially while in bed.

Be sure to sleep on your side or your back during the trial.

Do not raise or reach your arms over your head. Do not shower or soak in a bath. Expect to sponge bathe for 1 week. Be careful not to immerse the leads or the pack in water.

Expect soreness and discomfort for the 1-2 days after the procedure. This should begin to subside by the end of the second day.

You will take an oral antibiotic.

Do not remove the gauze patch unless you notice some irritation or drainage. If you do see irritation or drainage, contact your physician's office immediately.

If you have a fever above 101, contact your doctor.

If you have any questions, please feel free to contact the office at any time.

You will be required to furnish a working contact number to your representative so that daily contact can be maintained during your trial. We are mandated by medical standards to continue contact during the trial portion so please be aware that you are expected to touch base with your representative on a daily basis.







