



P.O. Box 501724, San Diego, CA 92150
Phone 858.453.7700 Fax 858.798.1225

Spinal Cord Stimulator (SCS) Frequently Asked Questions

The following Frequently Asked Questions and answers pertain to Spinal Cord Stimulators only. The following material is given as general information only and is not considered as medical advice or consultation.

- **What is a Spinal Cord Stimulator?**

A Spinal Cord Stimulator is a specialized device, which stimulates nerves with tiny electrical impulses via small electrical leads placed against the spinal cord.

- **Am I a candidate for Spinal Cord Stimulator?**

Spinal Cord Stimulation is offered to patients with chronic and severe neuropathic pain (pain due to damaged nerves), who have not received adequate pain relief with other treatments, such as physical therapy, psychotherapy, medications, surgery and/or injections.

- **What is the purpose of it?**

This device interrupts some of the painful nerve impulses to the brain. In most cases, it does not block all of the painful impulses.

- **Does it “fix” whatever is causing my pain?**

Spinal Cord Stimulation does not cause any anatomical changes. It can, however, decrease the pain.

- **How will I know if Spinal Cord Stimulation will help me?**

It is very difficult to predict if the procedure will indeed help you or not. Therefore, the procedure is done in two stages. In the first stage temporary leads are placed against the spinal cord and an external battery (which is the size of a pocket radio) is used by the patient to generate and customize the electrical stimulation. The patient then goes home, where he/she is given the opportunity to truly see if spinal cord stimulation alleviates the pain when engaged in his/her normal, day-to-day activities. The trial period is about 3-5 days. If this trial is successful in relieving at least 50 to 70% of the pain, implanting a permanent device is recommended. A separate appointment is then made to implant the permanent leads against the spinal cord and a battery under the skin. In the meantime since the trial leads are only temporary ones, they have to be removed to prevent and infection from occurring.

- **Will the Spinal Cord Stimulator help me?**

For that reason temporary leads are placed to determine if this device will be effective to relieve your pain or not.

- **How long does the procedure take?**

Both the trial and permanent implant can each take up to 3 hours, depending on the patient's anatomy. In most cases the procedures can be performed in 2 hours or less.



- **How is it actually performed?**

The patient lies on their stomach for the entire procedure and is monitored with EKG, blood pressure cuff and a blood oxygen monitoring device. The skin is cleansed with antiseptic solution and then the procedure is carried out. Then a local anesthetic, (lidocaine), is used to anesthetize the skin and deeper tissues. The leads are then placed through a needle under x-ray guidance. The trial procedure is performed as an outpatient procedure. The permanent stimulator placement is performed in the operating room, but most patients usually go home on the same day the implant is performed. Some may need to be kept overnight for observation.

- **Will the procedure hurt?**

The procedure involves an initial injection of anesthetic (lidocaine) through skin and deeper tissues using a very small needle prior to beginning the procedure. So, there is some initial discomfort involved. Most of the patients also receive sedation and pain relieving medications through an IV to help them relax, which makes the procedure even easier to tolerate.

- **Will I be “put out” for this procedure?**

The placement of the temporary leads is done under local anesthesia. A pre-procedure sedative can be given if necessary. This is necessary to ensure proper placement of the leads. The amount of sedation and pain reliever given in the veins generally depends upon how well the patient is tolerating the procedure and how sleepy he/she may be feeling... For the generator placement, patients are given stronger intravenous sedation.

- **Where are the leads inserted? Where is the battery/generator placed?**

For the pain involving lower back, legs and/or feet, the leads are inserted in the middle of the lower back. The battery/generator is placed in either the left or right upper buttock. Generators can also be placed in the abdomen.

For the pain involving the neck, arms and/or hands, the leads are inserted in the middle of the upper back. The battery/generator is placed again either the left or right upper buttock.

- **Who should not have this procedure?**

If you are on a blood thinning medication (e.g. Coumadin, Plavix) or if you have an active infection going on, you should not have this procedure.

- **What should I expect after this procedure?**

If the procedure is successful, you may feel that your pain is significantly less. You will experience a fairly constant sensation of stimulation. You may have soreness for a day or two due to the needle injections.

- **What should I do after the procedure?**

The patient should have someone give him/her a ride home the day you have the temporary and permanent implant. We advise the patients to take it easy for a day or so after the procedure in order to heal from the procedure and to prevent the leads from moving out of place. Activities can then be performed as tolerated. If you have any questions about what activities are “safe or not safe” to perform, ask your Pain Physician.



- **How long will the battery/generator last?**

It depends on how often the patient uses it, and the intensity of stimulation required to relieve pain. The longer it is used and the stronger the intensity, the shorter the battery/generator life. This can be as short as 1 year or as long as 5 years. Fortunately, at this time batteries can be recharged. Rechargeable units will last longer depending on use. Most are approved by the FDA for 5 years or more. They would only need to be removed if they failed to recharge. After the battery/generator wears out it has to be replaced in the operating room in order for the device to continue to work. The leads, however, do not need to be replaced.

- **How long does it take to change the battery?**

One hour or less. This is done as an outpatient procedure.

- **What are the risks and side effects?**

Generally speaking, this procedure is safe. However, with any procedure there are risks, side effects, and possibility of complications. Please discuss your concerns with your physician.

- **What about MRI Scans?**

You will not be able to have any MRI scans in the future once the permanent device is placed. CT scanning is okay, but the magnetic field from the MRI is dangerous as it can pull the leads out of place and cause severe and sometimes irreversible injury to the spinal cord.

- **What about going through metal detectors at the airport?**

You will be given an identification card that has to be presented to the Transport Security Agent prior to going through the metal detector.

- **What about driving?**

You should never operate a motor vehicle with the stimulator device turned on, since it could impair your ability to control the foot pedals.

Where can I get additional information?

More detailed information is available from the manufacturer of the device. At the time of consultation you will receive a Spinal Cord Stimulation Patient Education Booklet. Additional information is also available at the:

1. Medtronic Web Site www.medtronic.com/neuro/apt/faq.html
2. Advanced Neuromodulation Systems (ANS) web site at www.ansmedical.com
3. Advanced Bionics web site www.controlyourpain.com/faq.asp