



**Jack E. Marshall, M.D.**

**Scott A. Mitchell, D.O.**

405.775.9355

## Oklahoma Interventional Pain Management

### SPINAL CORD STIMULATION (SCS)

#### WHAT IS SCS?

Spinal cord stimulation is the stimulation of nerves by tiny electrical pulses. An implanted lead, which is powered by an implanted battery or receiver, is placed against the patient's spinal cord. This system sends electrical pulses that block the pain messages to the patient's brain. Some patients describe the feeling of SCS as "tingling". SCS implantation is a reversible procedure that does not damage your spinal cord or your nerves. Typically, patients who have a successful SCS experience a 50 – 70% reduction in their pain.

#### WHAT TYPE OF PAIN CAN BE IMPROVED WITH SCS?

Intractable neuropathic pain is an indication for the use of SCS. Neuropathic pain is a pain that is caused by actual damage to nerve tissues, and is often felt as a burning pain or stabbing pain. It is often a chronic unrelenting pain, as compared to nociceptive pain, which is the pain felt by someone who has cut his/her hand or broken a leg. Nociceptive pain usually lasts a shorter period of time and is more responsive to traditional pain medicines. Unfortunately, most neuropathic pain does not respond to opioid pain medicines and often requires advanced interventions for pain relief.

#### WHO IS A CANDIDATE FOR SCS THERAPY?

The best candidates for SCS have severe chronic pain in their legs or arms. Patients with primarily leg or arm pain and mild back or neck pain can also benefit. In general, the wider the area of pain, the more difficult it is for SCS to be effective. Most patients who have tried more conservative therapies, but who have not experienced sufficient pain relief, are considered candidates for SCS therapy. The patient's doctor often feels that surgery would not be beneficial. Patients are required to undergo psychological screening and must not have any untreated drug addictions. The patient undergoes a trial stimulation and will be a candidate if this trial period is successful. The patient must make a commitment to be an active participant in his/her recovery. Contraindications to SCS include a tendency to abnormal bleeding or chronic use of a blood thinner, pain that is primarily located in the trunk, fever or infection of any kind, and any severe coexisting heart and/or lung problems.

# SPINAL CORD STIMULATOR IMPLANTATION

## FREQUENTLY ASKED QUESTIONS

***Q: Why do I have to have a psychological evaluation prior to surgery?***

A: Medicare, as well as most other insurances, requires the screening psychological exam. Its purpose is to make certain that you have realistic expectations about the implant and its ability to help manage your chronic pain. It is also useful to determine whether you have any concomitant psychological conditions that may interfere with your ability to have a successful outcome.

***Q: How long will it take to schedule my surgery?***

A: After a successful stimulator screening trial, we will work to get you scheduled for implant within 2 to 4 weeks. This is easier if you have already had your psychological evaluation. Occasionally, we must wait longer for insurance authorization.

***Q: On average, how long does the surgery take?***

A: The surgery usually takes about one to two hours. You will need to arrive 2 hours before you are scheduled to start. Most cases are done on an outpatient basis, which means you can usually go home two to three hours after surgery. If an overnight stay is required, you will be admitted under 23-hour observation status.

***Q: What are the risks associated with surgery?***

A: Implanting a stimulator system has risks similar to spinal procedures, including spinal fluid leaks, headaches, swelling, bruising, bleeding, infection, or paralysis.

***Q: How big are the incisions?***

A: There is a 2 to 3 inch incision along the spine that is used to place the lead in the spine. The incision for the stimulator (battery) is about 4 inches long. The lead wire is tunneled under the skin and connected to the stimulator.

***Q: After the implant, what precautions should I follow?***

A: During the first 6 to 8 weeks following the surgery, you will need to avoid lifting, bending, and twisting movements. This allows time for scar tissue to form and anchor the lead. You may be required to wear a cervical collar or lumbar elastic support brace for 6 weeks.

***Q: What if my bandage needs changed after surgery?***

A: We ask that you leave your initial bandage on until you come in for your 1-week post-op visit. Occasionally, the bandage will become soaked through with blood and in that case you may change it out with fresh 4x4 gauze bandages. If it soaks through a second time please notify our office.

***Q: Is it normal to feel pain for weeks after the surgery? What can help?***

A: You will probably experience pain for 2 to 6 weeks after the surgery. This pain, caused by developing scar tissue, happens with any type of implant surgery. It is your body's natural response to the implant.

Once scar tissue forms, the pain will begin to diminish. Ice can help with pain and swelling at the affected areas. You will be given a prescription for pain medication after surgery.

**Q: How soon can I return to work?**

A: If you have been working up until the time of your implant, you may be able to return to work within 2 weeks of your surgery. If your job involves any repetitive lifting, bending, twisting or stooping you may need to be off work for 6 weeks in order to avoid possible movement of the stimulator lead.

**Q: Can I go in a bath, hot tub, steam room or sauna?**

A: Yes, after your incisions have healed. If you feel any localized heat sensation around your stimulator, you should get out of the tub or sauna room.

**Q: When should I call?**

A: You should call when:

You have excessive bleeding after surgery that soaks through the bandage after it has been changed one time.

You experience excessive or unusual pain, swelling or redness around your incisions.

You notice unusual changes in the quality or location of your stimulation or when you experience no sensation at all.

You are increasing stimulation more often than normal.