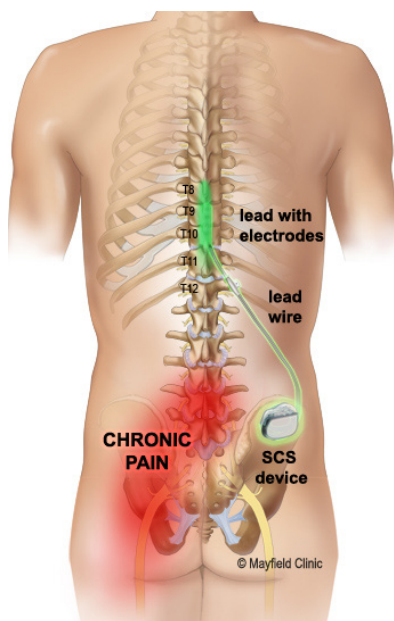


SPINAL CORD STIMULATOR IMPLANT

CANDIDATES FOR A SPINAL CORD STIMULATOR IMPLANT

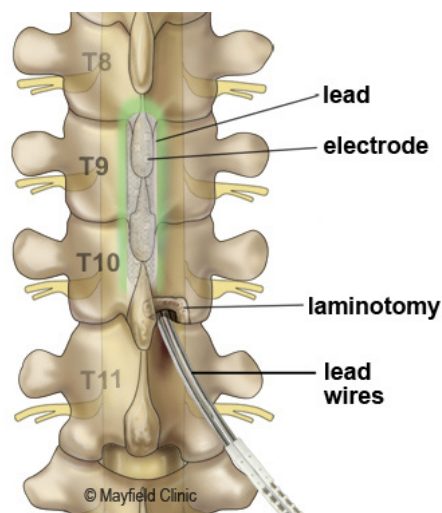
Patients who experience chronic pain and for whom nonsurgical pain treatment options have failed may be candidates for a Spinal Cord Stimulator Implant. Some candidates may have even undergone surgery to treat back pain and the surgery was unsuccessful. A Spinal Cord Stimulator Implant may be a treatment option for Arachnoiditis, or inflammation of the arachnoid, Diabetic Neuropathy or other nerve-related pain, Peripheral Vascular Disease, post-surgical pain, heart pain, visceral abdominal pain or other conditions causing discomfort.

A Spinal Cord Stimulator Implant is typically used in conjunction with other methods of treatment, including pain medication, exercise, physical therapy and relaxation methods to improve the patient's quality of life and sleep.



WHAT IS A SPINAL CORD STIMULATOR IMPLANT?

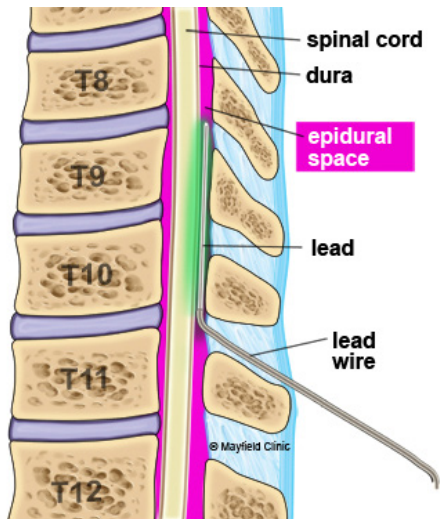
A Spinal Cord Stimulator is an implant that emits low-level electricity to the spinal cord to alleviate pain. In the procedure, the device's electrodes are placed between the spinal cord and the vertebrae and its generator is placed under the skin. Patients can control a remote to activate the stimulator when they feel pain.



There are three main categories of Spinal Cord Stimulators: battery-operated, rechargeable and radiofrequency. A conventional battery-operated implantable pulse generator (IPG) is placed in the spine during surgery and when the battery runs out, another surgery is required. This option is best suited for patients with localized pain, as it emits a lower level of electrical currents.

A rechargeable IPG differs from a conventional IPG in that it can be recharged without an additional procedure. This version emits a higher level of electricity and can be used to treat lower back and/or leg pain. The electrical signal can reach further from a rechargeable IPG.

Lastly, a radiofrequency stimulator uses a battery that is outside of the body. The batteries of the device are rechargeable and as such, it can also emit higher levels of electricity to treat lower back and leg pain. However, these devices are less commonly used due to advances in technology.



RESULTS OF A SPINAL CORD STIMULATOR IMPLANT PROCEDURE

Most Spinal Cord Stimulator Implant procedures last about one to two hours and patients can leave the surgery center the same day. Patients may experience pain surrounding the incision site and should refrain from stretching, twisting or reaching to maintain the integrity of the sutures. The incision site will be dressed after surgery, which can be removed after about three days. The recovery time for the procedure is usually two to four weeks.

After about two weeks, patients can typically return to normal activity. Lighter activity is recommended prior to two weeks post-op.

The goal of the implant is to improve the patient's quality of life

and range of motion. The implant is intended to provide pain relief through the spinal cord stimulators when activated, allowing the patient to perform more activities than he or she was able to previously.

WHAT ARE THE RISKS OF A SPINAL CORD STIMULATOR IMPLANT?

Complications from a Spinal Cord Stimulator Implant are uncommon but do include infection and bleeding. The device may migrate from its original location and will not be as effective. Additional surgery may be required to replace the electrodes. An intense fall or physical activity could damage the device.

A dural puncture is also possible, as the electrodes are placed in the epidural space just outside the dura mater. If a needle or electrode pierces the dura mater, it may cause cerebrospinal fluid to leak out. The procedure may also cause spinal cord trauma resulting in nerve injury and paralysis.

PRE AND POST-PROCEDURE INSTRUCTIONS

Pre-Procedure:

1. You will need to complete a medical clearance and/or lab work prior to surgery. Specific instructions will be given to you by our scheduling coordinator. You should get your lab work done PRIOR to your medical clearance appointment so your PCP can review the results during the appointment.
2. You must discontinue the following medication seven (7) days prior to surgery: Aspirin, Aspirin related products, NSAIDS such as Advil, Ibuprofen, Aleve, Feldene, Nuprin, Motrin, Celebrex, Darvon, Ecotrin, Endodan, Excedrin, Florinal, Norgesic, Orphengesic, Percodan, Pravigard, and Soma. These medications may be resumed as soon as possible when deemed safe by your surgeon.
3. YOU MUST discontinue ALL blood thinners such as: Plavix

(Clopidogrel), Coumadin (Warfarin), Eliquis, Pradaxa, Brilinta, Fish Oil, Aggrenox, Vitamin K, Vitamin E, Vitamin B6 7 day prior to surgery. These medications may be resumed as soon as possible when deemed safe by your surgeon.

4. FOR WOMEN ONLY: Hold Estrogens (Cenestin, Estratest, Estropipate, Menest, Ortho-Est, Premarin, Premphase, Prempro etc.) on the day of surgery and resume when instructed by your physician.

5. Hold ALL herbal supplements including garlic, ginseng, and St. John's Wart 7 days before surgery.

6. Please discontinue any and all diet pills two (2) weeks prior to your surgical procedure.

7. DO NOT EAT OR DRINK ANYTHING AFTER MIDNIGHT THE DAY BEFORE YOUR SURGERY, AND NOTHING ON THE MORNING OF YOUR SURGERY, UNLESS OTHERWISE ADVISED BY YOUR PHYSICIAN. You may take essential medications, such as blood pressure medications with JUST a sip of water.

8. Please arrive at the surgery center about 1-2 hours prior to your anticipated start time. Typically, the surgery center will provide you with instructions on when to arrive and specific directions (1-2 days beforehand) on when to get there and what to bring. However, it is VERY important that you bring your most recent imaging with you (CT scan/MRI disk).

9. We highly encourage bringing a friend or a family member to the surgery center with you, so that we can explain the post-operative rules and instructions.

10. After your procedure, you will recover in the PACU where nursing staff will provide you with post-operative care and inform you of how the procedure went.

11. If you are prescribed opiate pain medication by another physician (such as pain management physician), MAKE SURE you

see them prior to surgery so you are covered for post-surgical pain. Pharmacies will not fill prescriptions from another provider. If you do not take opiates at home, we will prescribe you with a 7-day course to cover your post operative pain.

12. After surgery, you will most likely require physical therapy. This has been proven to lead to optimal outcomes. If you have a preference of a physical therapist, please let your provider know prior to or during your post-operative appointment.

Post Procedure:

1. Refrain from strenuous activities and follow post-operative instructions.

2. Pain can increase in your treatment areas 2-5 days after your procedure. It may take up to 14 days for symptoms to improve. Symptoms may fluctuate during the healing process, which occurs over 4-8 weeks. You likely will not feel fully back to "normal" for about 3 months.

3. You may have some difficulty swallowing and a sore throat for several days after your procedure. This is very common and will typically go away on its own. If it does not go away or you have difficulty with breathing please, call the number provided below.

4. You should apply ice around places of discomfort for 20 minutes on and 20 minutes off. Please place a barrier between your skin and the ice. Heat is okay to apply to your back or neck muscles, just not over the incision site.

5. You may experience a low-grade fever after treatment. Call if your temperature is above 100.4.

6. No anti-inflammatory medication (Celebrex, Advil, Mobic, Motrin, Aleve) should be used for 10 days after surgery.

7. Light exercise or physical therapy is okay to start 2 weeks after treatment.

8. Pain medication prescriptions may say to take 2 tablets every 6 hours. If your instructions say this, **JUST TAKE ONE** tablet every 4-6 hours as needed for pain. **WE DO NOT REFILL NARCOTIC PAIN MEDICATIONS AFTER SURGERY.** If you continue to have pain, you will need to see a pain management doctor for narcotics.

9. If you were prescribed a brace, you must wear it when out of bed. If you are sleeping, sitting down, relaxing or eating, you may remove your brace. You will be in your brace between 4-6 weeks, depending on the type of surgery you had. If you had a cervical disc arthroplasty “replacement,” you will only require a soft collar for two weeks.

10. Do not drive until you can stomp your feet on the ground and do not feel pain.

11. Wound care: You will have stitches buried underneath your skin. They will dissolve on their own. On top of the wound, you will have skin glue and steri strips (which look like little pieces of white tape). **PLEASE INFORM PROVIDER PRIOR IF YOU HAVE ANY ALLERGIES TO SKIN GLUE OR ADHESIVE PRODUCTS.** Do NOT remove or peel off steri-strips, these will fall off on their own. On top of the steri-strips, you will have gauze and tape. The gauze and tape is what you will be able to remove in 3 days. Do not wet the dressing at all in those 3 days. On day 3, you may remove the top layer of your dressing in the morning and shower as you normally would. **DO NOT SUBMERGE** wound in water for 3 weeks (bath tub, jacuzzi, beach, etc.).

12. Besides narcotic medication for pain, you may use Tylenol (acetaminophen) to optimize pain control. You may take up to 3,000 mg per day, unless contraindicated due to allergy or liver issues. Make note that some narcotics are mixed with Tylenol, (for example, Percocet has 325 mg of Tylenol per pill) so dose accordingly.

13. You may walk as long as you are stable. We do want you out of bed as much as possible unless otherwise instructed. **NO BENDING,**

TWISTING, OR LIFTING OVER 10 LBS FOR 4 WEEKS.

14. You will need to follow up in the clinic for a post-operative evaluation in 4 weeks. Depending on your procedure, you may be required to have an X-ray done prior to the appointment. **PLEASE BRING THE CD OF YOUR IMAGES.** Your X-ray script will be given to you the day of your surgery. If you do not receive it or lose it, please call for a new script.

15. You may have a drain after surgery. Do not be alarmed. The reason we place these drains is because you may have been a little “oozy” after the procedure. We place them so the extra blood and fluid can drain out of your wound easily. They are typically removed the next day by your home healthcare nurse. If you do not have home healthcare set up, call the office for an appointment to remove the drain. For questions regarding surgical scheduling, please call Chris (Scheduling Coordinator) at 727-605-1770 (EXT 1003). For any post-operative questions or concerns, please call our office at 727-605-1770. Please note that you may be sent to voicemail. We will return your call as soon as possible. If it is an emergency, please call 911. If you are calling after hours, please leave a voicemail in the general inbox and it will be forwarded to the medical team.

O: 727.605.1770

F: 727.605.1080

scheduling@premierneurosurgery.com