

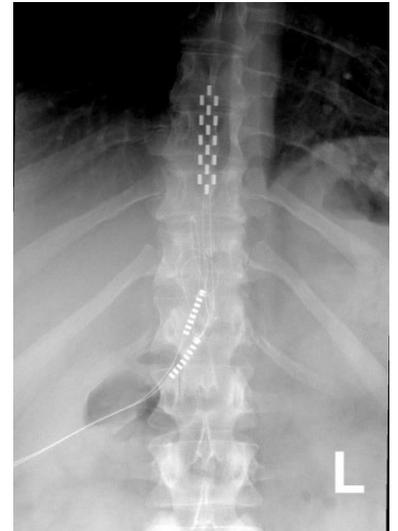


INTERVENTIONAL PAIN MANAGEMENT

Spinal Cord Stimulator Trial

WHAT IS A SPINAL CORD STIMULATOR (SCS) IMPLANTATION?

When chronic pain becomes so severe that all conservative measures have failed to control it including medications, surgery, injections, physical therapy, and alternative health methods, some patients may be candidates for spinal cord stimulator (SCS) implantation. The permanent spinal cord stimulator is a pacemaker type of generator that is implanted under the skin above the hip and connected to leads placed into the epidural space. The electrodes on the leads stimulate the spine at a higher frequency than incoming pain nerve signals; thereby causing the spine to filter out most of the incoming pain. However, prior to implanting such expensive technology, a trial lead placement is performed for a 3-5 day home trial stimulation. During the trial period at home, the patient can adjust stimulation settings to optimize pain relief. If and only if the patient receives more than 75% pain relief, the permanent system is later implanted. Prior to the permanent implant, the trial leads are removed by simply pulling on them.



WHAT ARE THE REQUIREMENTS FOR A SCS TRIAL?

1. Failed all conservative therapies, oral or transdermal narcotics are not controlling the pain, and there are no other definitive surgeries or procedures that will permanently help the pain.
2. Insurance precertification.
3. MMPI and psychological assessment.
4. PT assessment for suitability for an intrathecal pump.
5. No history of substance abuse, narcotic diversion, or prescription narcotic abuse.
6. Patient is deemed a candidate based on the personal interactions with the clinic physician and staff.
7. No medical issues that would preclude a SCS (infection over the generator or lead placement site, able to undergo an anesthetic, etc).
8. Chronic constant pain that cannot be relieved completely in any position. Burning type of pain responds better than any other pain.
9. TRIAL IS PERFORMED BY A PHYSICIAN ONLY.



WHAT ARE THE PAIN LOCATIONS THAT ARE USUALLY AMENABLE TO SCS?

Leg or arm pain more than back or neck pain, pain over the back of the scalp (occipital pain), chest pain, groin pain

WHAT PAIN SOURCES ARE USUALLY CONSIDERED FOR SCS?

RSD, post-spine surgery pain referring to the foot or hand, angina that cannot be adequately controlled with medications and no surgeries are possible, occipital neuralgia (back of the head), peripheral vascular disease pain.

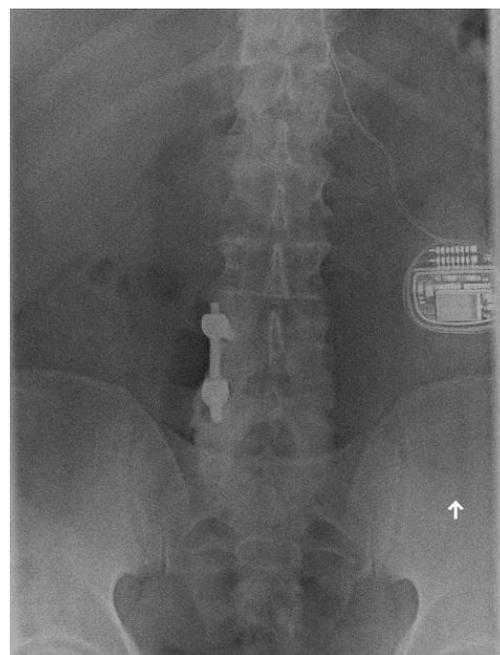
WHAT ARE THE RISKS?

Bleeding, infection, nerve injury, spinal cord injury, , blood clots in the spine, abscesses, spinal headaches, weakness or numbness of a leg or arm after the surgery, paralysis , need for further open emergency surgery, and meningitis are all rare.

HOW IS A SCS TRIAL CONDUCTED?

You will be brought to an operating suite in an office, surgery center, or hospital, and sometimes IV sedation is given, an epidural needle is placed into the low back under x-ray guidance. A lead with electrodes attached is then guided into the epidural space and advanced to the mid back for leg pain and to the neck for arm pain. For occipital head pain the placement is across the back of the scalp, and for angina pain the leads are placed at the level of the upper thoracic spine. Electrical stimulation through the leads is then given and if the coverage area is adequate, the needles are removed, the leads taped in place, and you will be sent home. If inadequate stimulation is seen prior to removing the needles, the lead position may be adjusted. The leads usually remain in for 3-5 days during which time you will be able to control the level of pain control and decide whether SCS permanent implantation is indicated. You will receive oral antibiotics to help prevent infection and meningitis, so it is mandatory to take these antibiotics.

The leads may migrate or fall out during the trial!



DO I NEED TO STOP MY ORAL OR TRANSDERMAL NARCOTICS?

Typically, about 1-2 weeks before the trial, you should reduce your oral or transdermal narcotics by one half, and then during the trial, further reductions may be needed. Ask your doctor for specifics that are tailored to your condition.

WHEN CAN I RETURN TO WORK?

We prefer patient s return to work or to their usual activity level as soon as possible, and most can work the day following the SCS trial procedure. It is suggested one avoid lifting the hands over the head or bending forward during the trial period unless absolutely necessary.

WHAT WILL I FEEL DURING THE TRIAL?

A mild tingling sensation in the back and extremities. Too high a stimulation will result in positional shocks and too low will result in lack of pain control. The leads are floating in the epidural space during the trial period and will result in positional changes in stimulation. Therefore one should not drive with the temporary trial stimulator turned on. The permanent leads have much less positional nature after a few months after implantation.

SPECIAL INSTRUCTIONS:

Stop Aspirin and Plavix 7 days before the procedure.

Stop coumadin 5 days before the procedure.

Stop Ticlid 14 days before the procedure.

DO TAKE ALL OTHER USUAL MEDICATIONS WITH SMALL AMOUNTS OF WATER ON THE DAY OF THE PROCEDURE.

If sedation is scheduled, nothing to eat or drink after midnight on day of the procedure except the patient may drink WATER ONLY up to 8 hours before the procedure and should take the usual medications.

DO NOT RESUME COUMADIN, TICLID, ASPIRIN OR PLA VIX UNTIL AFTER REMOVAL OF THE LEADS!!!

You will need a driver afterwards.

AFTER THE PROCEDURE:

You will stay in recovery for about 45 minutes after the procedure and should be able to drink juices and have a clear head before discharge without any leg weakness or significant numbness.

DISCHARGE INSTRUCTIONS:

- **Activity and Diet:** Return to normal activity and diet immediately.
- **Medications:** Resume normal medications unless otherwise instructed and take your antibiotics.
- **Dressing:** You will have a small dressing placed over the catheter sites. Keep these dry for 3 days. You may NOT shower, swim, or Bathe during the trial

NOTIFY YOUR PAIN DOCTOR IMMEDIATELY for new onset or worsening numbness or leg weakness not known to the surgeon, loss of bowel or bladder control, fever of > 101.5 degrees, severe increase in low back pain, any drainage from beneath the bandages, severe headache or chills, inability to urinate, severe nausea, stiff neck, over sedation, slurred speech, incoherency, shortness of breath, or significant change in stimulation pattern. If the SCS trial stops working or has achieved less than 75% reduction in pain, notify the office the following day.

EMERGENCY CONTACT TELEPHONE NUMBER: 911