

Therapeutic Pain Management Medical Clinic

Redding Anesthesia Associates Medical Group

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Dorsal Column Stimulator (DCS) or Spinal Cord Stimulator (SCS) FAQ's

The following Frequently Asked Questions and the answers are for the Dorsal Column Stimulator. **The following material is given as general information only, and is not to be considered as medical advice or consultation.** The information was prepared by the TPM staff.

What is a Dorsal Column Stimulator?

Dorsal Column Spinal Cord Stimulator is a specialized device, which stimulates nerves by tiny electrical impulses via small electrical wires placed on the spinal cord.

Am I a candidate for Dorsal Column Stimulator?

Currently at TPM, Dorsal Column Spinal Cord Stimulator is offered to patients with chronic and severe neuropathic pain, who have not responded to other treatment modalities. Neuropathic pain being pain due to damaged nerve tissue.

What is the purpose of it?

This device interrupts nerve conduction (such as conduction of pain signals) to brain.

How long does the procedure take?

It is done in two stages. In the first stage, temporary wires are placed and an external device is used by the patients to generate electrical current. If this trial is successful in relieving pain, then the permanent device is placed under the skin. Each procedure can take up to 3 hours.

How is it actually performed?

The wires are placed under x-ray guidance and a local anesthetic like novocaine is used to numb the skin and deeper tissues. The procedure is performed in the operating room to maintain sterility.

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Will the procedure hurt?

The procedure involves inserting a needle through skin and deeper tissues (like a "tetanus shot"). So, there is some discomfort involved. However, we numb the skin and deeper tissues with a local anesthetic using a very thin needle prior to inserting the needle. Most of the patients also receive intravenous sedation and analgesia, which makes the procedure easy to tolerate.

Will I be "put out" for this procedure?

The placement of the wires is done under local anesthesia with patients mildly sedated. This is necessary to ensure proper placement of the wires. The amount of sedation given generally depends upon the patient tolerance.

For the generator placement, patients are given stronger intravenous sedation.

How is the procedure performed?

It is done with the patient lying on the stomach when placing the wires. For the insertion of the generator, patients are placed on their back or on the side. The patients are monitored with EKG, blood pressure cuff and blood oxygen-monitoring device. The skin is cleaned with antiseptic solution and then the procedure is carried out. X-ray (fluoroscopy) is used to guide the needle for wire placement.

Where are the wires inserted? Where is the generator placed?

For the pain involving lower back and lower extremities, the wires are inserted in the midline at the lower back. The generator is then placed on the side of the abdomen.

For the pain involving upper extremities, the wires are inserted in the midline at the upper back. The generator is then placed on the side of the chest.

What should I expect after the procedure?

If the procedure is successful, you may feel that your pain may be gone or quite less. You will experience a fairly constant sensation of stimulation. You may have soreness due to the needles used for a day or two.

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What should I do after the procedure?

This procedure is normally a day-procedure. Some patients may be kept overnight for observation. You should have a ride home. We advise the patients to take it easy for a day or so after the procedure. Perform the activities as tolerated by you.

How long will the generators last?

Depending upon how much the device is used (intensity and duration), the batteries in the generator may last several years. The batteries can not be replaced or recharged.

Will the Dorsal Column Spinal Cord Stimulator help me?

It is very difficult to predict if the procedure will indeed help you or not. For that reason temporary wires are placed to determine if this device will be effective to relieve your pain or not. Typically, patients will have a 50 to 70 % reduction in their pain.

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.

Who should not have this procedure?

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

Where can I get additional information?

More detailed information is available from the manufacturer of this device. At the time of consultation you will receive a Spinal Cord Stimulation Patient Education Booklet. Additional information is also available at the Medtronic[®] Web Site @ <http://www.medtronic.com/neuro/apt/faq.html>.

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