

Spinal Cord Stimulation

A spinal cord stimulator (SCS) is a specialized device that applies tiny electrical impulses to the spinal cord and spinal nerves that block the transmission of pain sensation to the brain. The procedure involves placing a small pulse generator and a thin electrical wire (or lead) along the spinal cord to create the impulses.

Spinal cord stimulation improves pain and function for:

- Patients who failed to achieve adequate relief with spine surgery on the neck or lower back
- Those suffering from complex regional pain syndrome types one and two (RSD)
- Painful peripheral neuropathies including diabetic and postherpetic neuropathy
- A variety of other painful conditions of the limbs and spine

How SCS works

The body is naturally designed so that the spinal cord transmits pain from peripheral tissues to the brain. With SCS, a small pulse generator and insulated electrical wires are placed into the body. Electrical impulses generated by a spinal cord stimulator disrupt painful signal transmissions to the brain. Instead of pain, a pleasant sensation is perceived. The amount and rhythm of the stimulation is controlled by the patient via a handheld remote to maximize personal comfort.

Trial Period

Unlike many medical therapies, SCS allows patients to experience a trial period when wires are placed via a minimally invasive approach and removed after one week of use. No incisions are necessary.

What to expect

Placement of a trial SCS takes from thirty to sixty minutes. Placement of a permanent SCS takes from one to two hours and is done under general anesthesia.

After the Procedure

SCS is generally considered successful if your pain is reduced by 50 percent, if you are able to return to your daily activities, if your need or pain medication is reduced and/or you are able to relax and sleep better.

Patients return for follow up one week after the SCS is permanently placed and then one year after if there are no issues and relief continues. SCS can be removed if necessary.

Why is a psychiatric consult required?

Candidates are required to receive a psychiatric consult in order to rule out untreated psychological conditions that may interfere with pain processing. The consult is required by all health insurance plans.

If you have any questions, please call the Pain Center at 617-754-5450 and ask to speak with a member of the clinical team.