



## SPINAL CORD STIMULATOR TRIAL AND IMPLANT

Spinal cord stimulation (SCS) therapy has been used for over 30 years to treat pain. SCS works by delivering mild electrical impulses to the appropriate area of your spinal cord to produce a gentle tingling feeling (paraesthesia) to relieve your pain. Although stimulation may reduce your pain, it does not cure or eliminate the cause of your pain. A big advantage of SCS is that it is a reversible non-destructive procedure. The trial result is the best predictor of the 3 month outcome which is the best indicator of the result at 5 years and beyond. SCS helps 60-70% patients to become more active, have a better quality of life and reduce dependence on medications and other health care.

### RISKS:

Common to all therapeutic and diagnostic procedures there is the chance of infection, blood clots in veins and lungs, allergic reactions, haemorrhage/bleeding and even death. The following problems may occur: worse pain, no pain relief, nerve damage, paralysis, loss of bladder / bowel / sexual function, numbness, spinal tap and postural head ache, unwanted or inadequate stimulation, equipment failure or lead migration needing revision, and serious infection may require system removal. Drug withdrawal symptoms may occur whilst reducing/stopping any strong (morphine-like) pain killers.

### PREPARATION:

Please read the information provided, watch the video/DVD, ensure your questions and concerns have been answered, be aware of the benefits, limitations and risks of the procedure. **Check** <http://www.fpmx.com.au/solutions.html#treatment-procedures> and company websites <http://www.fpmx.com.au/patients.html#useful-links> **for more information.**

Please have your teeth checked by a dentist and any necessary work done BEFORE your surgery.

Ladies if you may be pregnant, please tell your doctor ASAP.

Please have nothing to eat for 6 hours and nothing to drink for 2 hours before the procedure.

Please take your normal medications with a sip of water.

Please obtain specific instructions, if you are taking 'blood thinners' (eg warfarin or clopidogrel), insulin or diabetic tablets.

### PROCEDURE:

The procedure is usually done in two stages with a trial, followed if successful, by the implantation of a permanent system. A small needle may be placed into a vein in your arm. You will be taken to the operating theatre. The target area will be cleaned with antiseptic and covered with sterile drapes (which you must not touch). After local anaesthetic is injected, temporary leads are inserted using fluoroscopic guidance between the backbone and spinal cord (epidural space). The leads will be tunnelled to a convenient location and secured to skin.



During the trial stimulation please tell us where you feel the tingling. We will consider the trial successful if stimulation improves blood flow, sleep, activity, sitting, standing and walking tolerances, reduces pain and medication usage.

After a successful trial, permanent leads are inserted and connected by wires running under your skin to a surgically implanted rechargeable neurostimulator also placed under the skin. The location of which depends on your area of pain, body size and type of device.

## **DURING THE TRIAL/SCREENING PERIOD:**

You will be encouraged to have day leave, go home and do your normal activities to 'road test' the SCS for pain relief.

It is however important to AVOID over activity and extreme movements.

DO NOT use monkey bars or lift items weighing more than 3 kg.

DO NOT over twist, bend or stretch your body at the waist/neck. (depending on your SCS location)

DO NOT shower (you may 'dry wash' the essentials)

## **POST IMPLANTATION:**

After implantation surgery the neurostimulator is programmed by a qualified technician to control your pain. When you go home you will take a hand-held programmer that lets you "fine-tune" the stimulation for your own needs. It may take several sessions of programming in the doctor's office to obtain the best possible pain relief. Please follow your prescribed activity plan and progressively resume your desired activities as tolerated. It is usually safe to return to sedentary work in 2 weeks, more vigorous activities in 4 weeks and most people wanting to work have found and returned to work within 4-6 months.

## **WARNINGS:**

DO NOT drive or operate dangerous equipment if you feel stimulation, to avoid the risk of sudden stimulation surges.

Report pain, swelling, redness, wound leakage. These symptoms may indicate infection.

Report unexpected changes in stimulation, painful sensations (turn device OFF)

MRI scans can be conditionally performed for some indications on some spinal cord stimulators since 2014.

MRI scans are contraindicated on all older spinal cord and all peripheral nerve stimulators.

Avoid ultrasound examinations or short-wave diathermy within 10cm of the IPG (neurostimulator).