



## **MUNSON NEUROSURGERY SPINAL CORD STIMULATION PROGRAM PAMPHLET**

### **What is spinal cord stimulation?**

Spinal cord stimulation is used to manage chronic pain due to a variety of reasons, such as, unsuccessful surgery, and neuropathic pain. Chronic pain occurs when your body's normal response to pain becomes disordered. Spinal cord stimulation helps modulate the pain signals you interpret, using tiny electrical impulses that are imperceptible to you. Improved pain levels, better quality of life and increased mobility, are among many of the benefits.

### **Why do I have chronic pain?**

While our knowledge and understanding of pain has improved dramatically, we know that with chronic pain there can be more questions than answers. Chronic pain can result when your body perceives continued injury or pain impulses inappropriately, sometimes long after healing has occurred. Some patients may have had previous trauma or surgery, while others have no significant medical history at all. Pain, like all of us, is unique and Spinal cord stimulation can be a very effective way to manage difficult pain. Especially pain that may be less responsive to medication and typical pain treatments.

### **How can I best manage my chronic pain?**

It is important to maintain healthy habits like eating nutrient dense food, staying as active as possible, and following up with your primary care team and/or your pain team regularly to monitor any contributory conditions. It is also recommended to engage in low-risk conservative measures such as physical therapies, exercise programs (doesn't need to be strenuous to work!), and interventional procedures (injections, rhizotomies), as many of these can make a big difference. If, however, you have engaged in these measures without durable relief, spinal cord stimulation may be an option for you.

### **What kind of pain can be helped by Spinal Cord Stimulation?**

A wide variety and locations of pain can be helped by spinal cord stimulation. We typically see patients with low back pain, leg pain, hip pain, knee pain, foot pain, painful diabetic neuropathy, pelvic pain, and even phantom limb pain. Other indications include postherpetic neuralgia, Complex Regional Pain Syndromes, Refractory Angina, and Multiple sclerosis. Spinal cord stimulation can help with chronic, predictable pain, while sparing your body's normal response to "acute" or "nociceptive" pain. One advantage of spinal cord stimulation is the ability to perform a trial to see if your pain pattern is responsive.

### **What is the sequence of events to follow if I want to see if Spinal Cord Stimulation is right for me?**

Once we establish that spinal cord stimulation is a reasonable option for your pain pattern, and that you are medically appropriate for the procedure, you will undergo a Psychological Evaluation. This will help to determine if the spinal cord stimulator is the right treatment for you and to avoid any negative effects on your mental or physical health. Pending the psychologist's input, you will be scheduled for a trial stimulator. A trial is performed first, to confirm that this treatment will work for you. The trial will give your team great information about pain coverage. If the trial results in a reduction of your pain by at least 50%, then you become a candidate for permanent implantation of the system.

### **How is the "Trial" performed?**

For the trial, you will be positioned comfortably on your stomach. We will wash your back and cover it with sterile drapes, and you will be given some medication through the IV to relax and sedate you. A local anesthetic is used to ensure you are comfortable throughout. Then we use an Xray machine for image guidance, to place 1-2 small leads through a needle into the epidural space of the spinal canal. Several pictures will be taken to ensure the leads are in the right place for your pain pattern. Then, the leads will be connected to a portable battery, which is cleaned and taped to your back. You will then be brought to the recovery area for further care. Most patients can leave about an hour later. We will review with you your post-trial discharge instructions and confirm your lead removal appointment date.

Throughout the week, our team will be in contact with you to gauge your progress, answer any questions or concerns, make relevant adjustments, and provide guidance.

At your follow up appointment, we will remove the leads and talk about your trial. Together, we will be able to determine if moving forward with the permanent placement is the right thing for you.

### **How is the "permanent placement" surgery performed?**

This is performed in the operating room while under a general anesthetic. For this procedure, you are positioned on your stomach, special spinal cord recordings will be set up and 2 new leads will be placed, like in the trial. This is accomplished by making small incisions around the needle to anchor the leads in the place, and a third small incision on your flank area for the battery pack. You will have local anesthetic injected into these wounds to help with pain control. After the procedure, you will be taken to the recovery room to wake up. Once awake you will receive discharge instructions and you will be able to go home the same day as your procedure. Most patients use Tylenol for pain control without significant issues.

### **What about follow-up?**

Two weeks after surgery, you will see our Neurosurgery Nurse who will check your wounds, provide further education, and answer any questions you have. Your device will be turned on at this appointment. Four weeks after surgery, you will meet with the entire team, including your Nevro representative. Any further follow up that is required will be scheduled at this appointment. Should you need any other assistance you can reach out to the Nevro Rep and/or our office.

### **Can I get an MRI if I have this procedure?**

Absolutely! Always remember to inform your healthcare team that you have the device prior to any imaging.

### **What are the risks?**

The risks are low with spinal cord stimulation, but they are not zero, which is why it is important to always try non-surgical options to treat your chronic pain before considering a spinal cord stimulator.

Common risks include device migration and infection. Less common (very rare) but serious risks include bleeding, spinal cord injury, CSF leak.

### **How successful is Spinal Cord Stimulation?**

The evidence supports spinal cord stimulation as a highly effective treatment for various forms of chronic pain and diabetic polyneuropathy. Further data shows that many patients' sleep better, can decrease their narcotic dosages, and lose weight and improve their Hemoglobin A1C values.