Chapter 7
Practice Setup

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Key Points

- Having a SCS placed does not mean that spine surgery cannot be performed in the future. It is a treatment modality for their present pain.
- SCS has class I evidence of its superiority when placed against conventional medical management and against repeat spinal surgery.
- Practice setup for the pain physician and treating surgeon can be variable for these interventions.
- Relationships with pain physicians are crucial in spinal surgery. They are usually the first-line treatment for patients with pain with conventional management prior to surgery. They are also the treating physicians for those patients in chronic pain following spinal surgery.
- SCS is not a last resort therapy, with the literature supporting earlier intervention with appropriate patient selection.

Introduction

The neuromodulation community is based on a multidisciplinary approach that is diverse in its delivery. The pedigree of clinicians that offer and employ neuromodulation in their practice vary from neurosurgeons, orthopedic spine surgeons, and anesthesiologists to neurologists and rehabilitation physicians. For the formal nonsurgical residencies, an ACGME (Accreditation Counsel of Graduate Medical Education)-accredited

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fellowship is necessary to become Pain Board Certified. The most common disease indications for spinal cord stimulation (SCS) include FBSS, and complex regional pain syndrome (CRPS). The literature supports that SCS can produce at least 50 % pain relief in 50–60 % of the implanted patients and reduce the use of more medications [1]. Interestingly, with the proper follow-up care, these results can be maintained [1, 2]. Very few other invasive modalities can claim this success rate. In addition to SCS there are other therapies including intrathecal drug delivery (IDD), peripheral nerve stimulation (PNS), peripheral nerve field stimulation (PNfS), as well as kyphoplasty and vertebroplasty which can be implemented into this multidisciplinary approach.

For advanced pain care therapies, it is generally accepted that a trial is performed prior to implant. There are several factors that are important in being aware of these therapies and having access to them for your patients.

Referral Network

A proper referral network is an important component to offer your services in the management of pain patients, being mindful of where in the algorithm you would like your practice to be situated. You can quickly develop a niche by being the spine surgeon in your community who offers these neuromodulation therapies or who can help navigate a pathway to obtain them. Many models exist, with the most common for the surgeon described by a pain physician performing the trial and a surgeon performing the permanent implant. However models do exist with the surgeon performing both the trial and the permanent implant. The other option is working with an interventional pain physician who performs both the trial and permanent implant in whom you can build a referral network allowing you to share patients, but most importantly having therapies available to your patients in chronic pain.

Relationships

It goes without saying, but building relationships with doctors in your referral network is important. It allows your practice to grow, and builds your reputation as a surgeon. Relationships with pain physicians are crucial in spinal surgery, as they are usually the first-line treatment for patients with pain with conventional management prior to surgery. They are also the treating physicians for those patients in chronic pain following spinal surgery.

Pain Physicians' and Surgeons' Roles

As a surgeon, your role determines the surgical procedure and the postoperative care, and influences the longitudinal implementation of the therapy. In the realm of interventional pain therapies, such as SCS, there are variable relationships. A common

setup includes surgeons who identify patients as either surgical candidates or those who are candidates for SCS. For those patients who are not spinal surgery candidates, a pain physician may then perform a trial of the therapy and either move on to permanent implantation or refer the patient back to the surgeon for permanent implantation. Obviously, communication between the two providers, regarding contact and lead placement that yielded the most efficacious treatment, along with supporting documentation, will help mitigate poor outcomes.

By developing a strong relationship with pain physicians you can determine the roles that work mutually for both sides. A common referral to a spine surgeon in this setting leads to a "surgery versus spinal cord stimulation evaluation." This fosters the most appropriate therapy for the patient. The relationship can span those patients who have undergone spinal surgery and subsequently have ongoing pain following a technically successful surgery or those patients who have not undergone previous surgery. Candidates for SCS or spinal surgery in this setting are most reliably identified from their surgeon.

Patient Identification Is Crucial

As with any spinal procedure, patient selection is paramount in success. Determining proper candidates for pain therapies is crucial.

Early Intervention

It is well known that early intervention in chronic pain is of crucial importance. SCS should not be viewed as a "last resort" therapy. It is important to view it as part of the treatment paradigm. The literature supports that earlier intervention with SCS leads to improved outcomes [3]. As the surgeon you can help drive these therapies in an earlier fashion as you have the most exposure to the patient in the first 6 months following a spinal procedure.

Benefits to Surgeons

As described, it is important to know that literature has shown that 40 % or more of spinal patients will carry the diagnosis of FBSS. This constitutes a large amount of patients within a spine practice that can benefit from these therapies, which have class I evidence to support its use [1, 4]. If you choose the role as an implanting surgeon, not only would offering these therapies substantially increase your case volume and reimbursement, but it will also help you build a niche in your market which will build your referral base, common referrals being evaluation for surgery

versus a SCS which helps build your practice on both ends. As an implanting surgeon you may share responsibility with pain physicians in your community who can maintain management of the patient, while you maintain management and responsibility of the SCS implant. Lastly, regardless of the role you choose, it gives you the ability to have options for your patients. This is important as medicine's changing landscape has shifted to patient-centered care.

It is important to realize that your toolbox as a surgeon is based on your knowledge base, technical proficiency, and access to therapies for your patients. By having a working knowledge of these neuromodulation therapies, you will be able to offer the patients what is truly in their best interest, as repeat spinal surgery or even initial spinal surgery is not always the best option [1, 4]. These therapies can be implemented in your practice and increase case volume, maintain the physician–patient relationship, and foster a treatment for the patient over the continuum of their care. Lastly, it is important to realize that these therapies are treatments for their current conditions as spinal surgery may be warranted in the future even after a neuromodulatory intervention.

Summary

Building a neuromodulation and pain practice requires development of expertise and patient access. Providing access to appropriate pain care is essential in the development of a surgeon's practice. Appreciating this paradigm, many patients already in your practice would likely benefit from these neuromodulation modalities. Practice setup can vary, but if integrated into the surgeons' practice would increase case volume and reimbursement, as well as build a niche in your market. Referral networks and relationships in a spine program are crucial for both surgeons and pain physicians alike. Surgeons should be well equipped to perform evaluations for surgery versus an SCS or IDD. In addition surgeons should be knowledgeable of the therapy options available in order to guide their patients, especially in the setting of pain following a spinal surgery. This helps build your practice by developing multiple touch points within a treatment algorithm. As an implanting surgeon, you may share responsibility with pain physicians in your community who can maintain management of the patient, while you maintain management and responsibility of the SCS implant.

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