



PSSO Newsletter



PIONEERS IN THE ADVANCEMENT OF PAIN MANAGEMENT TECHNOLOGY

DR. SAVINO, MD . DR JOHNSTON, DO



with the latest interventional therapies for mutual patients. Please feel to contact us to consult and discuss your patients' needs and areas where we can assist you.

Sincerely,

Joe Savino and George Johnston
Pain Specialist of Southern Oregon

Introducing Erica Bohan, M.D.



Dr. Bohan completed her Pain Medicine Fellowship and Anesthesiology Residency at Wake Forest University Baptist Medical Center in Salem, NC.

She also received her Doctor of Medicine at the University of Minnesota Medical School. She is a member with the American Society of Anesthesiologists and American

Medical Association. **Dr. Bohan is now accepting new patients.**

What is Peripheral Nerve Stimulation (PNS)?

Peripheral Nerve Stimulation (PNS) is a surgical approach to treat chronic pain in a small area of your body. Let's review a few words used in explaining this procedure:

- Peripheral means being on the surface or outer part of the body.
- Lead is a wire that electricity passes through.
- Neuropathy is nerve damage in the peripheral nervous system. Many things can cause this condition.
- Paresthesia is a tingling, pricking, or burning sensation on the skin.

Peripheral Nerve Stimulation involves surgery that places a lead (a wire---like electrode) next to peripheral nerves to control pain. The lead delivers rapid electrical pulses that are felt as a mild/pleasant tingling sensation called paresthesias. The goal of this process is to reduce pain and reduce your medication requirements.

Dear community partners,

We wanted to keep you updated on our practice and the very important and exciting advances in the field of interventional pain management.

We are always looking for areas where we can improve our relationships with our supporting clinics, providers, and referral coordinators. Our goal is to make the referral process as smooth as possible for your office and patients. With any medication management referrals, we wish to provide the full Pain Management approach, caring

Similar to heart pacemakers, electricity is delivered from the generator device to the nerve or nerves to dampen pain messages sent to the brain. You are able to control stimulation by turning the device on and off and adjusting stimulation power as needed. This is an example of an Internal Pulse Generator.

What conditions can be treated by PNS?

- Complex Regional Pain Syndrome
- Diabetic Peripheral Neuropathy
- Neck / Lower back Pain
- Occipital Neuralgia

Evidence Based Medicine

Few procedures in the medical or surgical literature have had as strong support from evidence-based medicine as **Radio-Frequency Neurotomy**, specifically for treating pain in the cervical spine. Studies have shown that approximately 60% of cervical spine pain in the absence of radicular symptoms arises from the cervical facet (zygapophyseal) joints. Each joint is innervated by two medial branches that are easily blocked. Greater than 80% immediate relief with two confirmatory medial branch blocks is predictive of a positive response to RF Neurotomy.

(Ref: RF Knee.2011 Mar;152(3):481-7.doi: 10.1016/j.pain.2010.09.029. Epub 2010 Nov 4. [Choi WJ](#), [Hwang SJ](#), [Song JG](#), [Leem](#), [Kang YU](#), [Park PH](#), [Shin JW](#))

Relief typically lasts between 6 to 18 months, at which time the procedure can be repeated.

Uses of RF Neurotomy have expanded to treating axial thoracic and lumbar spine pain as well as pain from the sacroiliac joints.

What is stellate ganglion block is used to diagnose or treat?

Post-Traumatic Stress Disorder (PTSD) develops in response to being exposed to extreme stress, serious injury, and/or sexual trauma.

The symptoms of PTSD present themselves as an assortment of psychiatric conditions: Nightmares, severe anxiety, insomnia, hyper-vigilance and over reactivity being the most pronounced. The sympathetic nervous system ("fight or flight") has been long known to play a part in PTSD. It is believed that extra nerves of this system sprout or grow after extreme trauma leading to elevated levels of norepinephrine (an adrenaline-like substance) which, in turn, over activates the amygdala (the fear center of the brain). This chain of events results in PTSD symptoms that may persist for years.

A part of the sympathetic nervous system, called Stellate Ganglion (a bundle of nerves in the neck).

A recent innovation offers potential in rapidly treating symptoms of PTSD for a prolonged period of time. Placing an anesthetic agent on the stellate ganglion, in a procedure called **Stellate Ganglion Block (SGB)** can relieve the symptoms of PTSD in as little as 30 minutes and last for years. SGB "reboots" the sympathetic nervous system to its pre-trauma state, similar to a computer reboot. In the brain, norepinephrine levels are rapidly reduced, and the extra nerve growth is removed. SGB is an anesthetic procedure that has been performed for many years and is considered a low risk pain procedure done under x-ray guidance.



Research results have been impressive. Incumbent PTSD treatments can take from months to years to work with success rates of under 40%. Overall SGB success rates have averaged 70-75% over the first nine years of use. In collaboration with neuroscientists and clinical observations, the author has modified the SGB procedure,

resulting in current success rates in the 85 to 90% range.

Patients do best when they adhere to a proper regimen of after care under the supervision of psychiatric professionals. CBT (Cognitive Behavioral Therapy), reduction or elimination of psychiatric medications, and meditation are commonly recommended. Reappearance of symptoms can occur if other trauma(s) are inflicted after SGB, if the patient is genetically predisposed to be sensitive to stress, or if the patient does not comply with the after-care protocol. Should symptoms reappear, then another SGB is likely to alleviate them.

SGB is not a cure for PTSD, however it is a highly effective, well tolerated, fast acting, inexpensive biologic technique that provides prolonged relief from the debilitating symptoms of PTSD. It will likely become a large part of the solution for patients with PTSD which include veterans, victims of sexual assault, first responders, and victims of crime and others.

Spinal Cord Stimulation Effective for Neuropathy Pain Over the Long Term



Most people who are treated with spinal cord stimulation due to painful diabetic neuropathy, or nerve damage, achieve long-term relief, according to a new study from the Netherlands. As many as 70% of people with diabetes have some form

of neuropathy, as stated by the National Institutes of Health [1].

Chronically high blood sugar levels can damage nerves throughout the body, including in the peripheral nervous system, which is responsible for transmitting information [2] to and from the brain and spinal cord to the rest of the body. Symptoms of diabetic peripheral neuropathy include pain, tingling, and numbness in the hands, feet, arms, and legs. Currently, only an estimated 40% to 60% of affected people achieve partial relief [3].

To determine whether SCS can control neuropathy pain over the longer term, researchers from Maastricht University Medical Centre conducted a 24-month follow-up of 17 participants from an earlier trial who had received benefits from the device.

At the end of the two-year period, 47% of participants reported a 50% pain reduction during the day and 35% reported a 50% pain reduction during the night. Additionally, 53% of participants reported a significant overall improvement in their pain levels and sleep quality, leading the researchers to conclude that SCS can successfully relieve neuropathy pain on a longer-term basis.

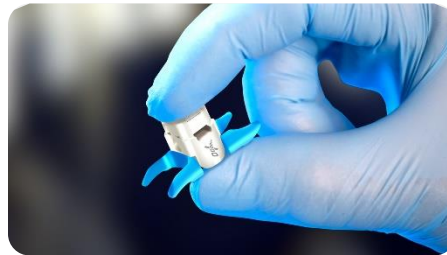
“Spinal cord stimulation serves as a successful last resort treatment...for the duration of at least two years in 65% of diabetic patients with painful neuropathy,” said researcher Dr. Maarten van Beek [4] in an e-mail to Reuters Health.

For more information, read the article “Spinal Cord Stimulation Benefit Ongoing in Diabetic Neuropathy” or see the study in the Journal Diabetes Care.

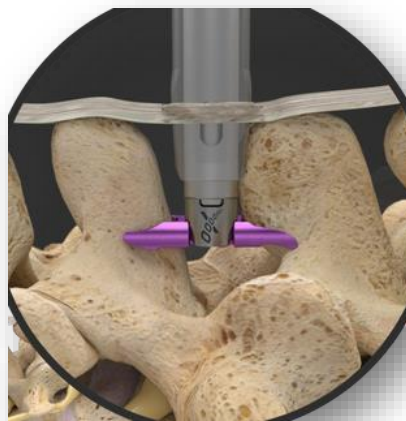
National Institutes of Health:
<http://www.niddk.nih.gov/health-information/health-topics/Diabetes/diabetic-neuropathies-nerve-damage-diabetes/Pages/diabetic-neuropathies-nerve-damage.aspx> responsible for transmitting information:
<http://www.nebraskamed.com/neuro/neuromuscular-disorders/peripheral-neuropathy>

1. <http://www.fusfoundation.org/diseases-and-conditions/brain-orders/neuropathic-pain> researcher Dr. Maarten van Beek:

The Superior Procedure Lumbar Spinal Stenosis (LSS)



Superior is a completely new, minimally invasive approach to treating lumbar stenosis that fills a gap in the continuum between conservative care and invasive surgery. Designed with patient safety and comfort in mind, Superior is implanted through a small tube the size of a dime to reduce tissue damage and blood loss. It's a simple outpatient procedure with a rapid recovery time and no destabilization of the spine.



Indirect Decompression

The Superior implant acts as an indirect decompression device. Its

anatomic design provides optimal fit and preserves a patient's anatomy and ability to maintain motion. Superior acts as an extension blocker, relieving pressure on the affected nerves in the manner that one would achieve relief in a seated or flexed position. Available in multiple sizes to accommodate varying patient anatomy, Superior ensures controlled movement and minimizes post-procedure complications. Superior was developed to provide patients with a safe and effective alternative when conservative treatment has failed, and laminectomy is too aggressive.

FDA approved, Superior is clinically shown to be effective for up to 60 months. Certain risks are associated with the use of Superior. Consult your doctor for more information regarding these risks.

http://www.accessdata.fda.gov/cdrh_docs/p/df14/P140004b.pdf

Cervical Facet Radiofrequency Neurotomy

Also known as a radiofrequency rhizotomy, this minimally invasive testing procedure has the potential to eliminate or reduce pain in facet joints suffering from damage due to injury or degeneration. Cervical facet joints are located on both the left and right side of the spine. These facets connect to specific vertebrae, which guide spinal movement. Pain in the cervical facet joints is typically the result of joint dysfunctions, and the symptoms of irritation in these faces may range from simplistic muscle tensions and spasms to more severe pain symptoms.



A radiofrequency rhizotomy of the cervical facet can relieve these symptoms in the majority of sufferers of this type of pain.

Arthritis of the Spine

Osteoarthritis is the most common form of arthritis, affecting millions of people worldwide. It occurs when the protective cartilage on the ends of your bones wears down over time. Although osteoarthritis can damage any joint in your body, the disorder

most commonly affects joints in your hands, knees, hips and spine.

Osteoarthritis symptoms can usually be effectively managed, although the underlying process cannot be reversed. Staying active, maintaining a healthy weight and other treatments may slow progression of the disease and help improve pain and joint function.

What Are the Symptoms of Osteoarthritis of the Spine?

Osteoarthritis of the spine may cause stiffness or pain in the neck or back. It may also cause weakness or numbness in the legs or arms if it is severe enough to affect spinal nerves or the spinal cord itself. Usually, the back discomfort is relieved when the person is lying down.

Some people experience little interference with the activities of their lives. Others become more severely disabled.

In addition to the physical effects, a person with osteoarthritis might also experience social and emotional problems. For instance, a person with osteoarthritis that hinders daily activities and job performance might feel depressed or helpless.

Our Location



825 Bennett Ave. Medford, OR

We are Southern Oregon's first interventional pain management practice with specialists in both anesthesiology and physiatry. We are well-respected for our conservative and innovative, treatment methods.

Meet Our Team

Joseph Savino, M.D.

George Johnston, D.O

Erica Bohan, M.D.

Paul Leppert, ANP-C

Denise Partin, FNP-C

Jeremy Cathey, ANP-C

Susan Rugh, FNP-C



A new state of art **ambulatory surgery center**. (Class B)

We offer two OR's, pre-op and post op bays with many accommodations.

Our Ambulatory surgery center (ASC) offer patients the convenience of outpatient surgeries, interventional pain management, GI/ endoscopic and/or podiatry procedures performed safely outside the hospital setting.

Dr. Joseph Savino and Dr. George Johnston are happy to discuss any variety of questions regarding your cases, availability, or how we can help your patients.

If you would be interested in doing **your outpatient cases** at our ASC, Please contact Rick at 514-200-2835.

Referring Providers:

We recognize the importance of your patients to you as well as your hectic schedule and need for timely evaluations and treatment recommendations. Other options sending a referral request:

- EPIC System
- FAX 541-772-1533
- Main Line 541-779-5228
- Website/referring physicians

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VISIT US ONLINE @
painspecialists.com

We would love to hear from you with your comments:

rickc@painspecialists.com