



## New applications for Spinal Cord Stimulation

Today's medical practices continue to experience a whirlwind of changes as technology advancements enter every stage. From administration and Electronic Health Records (EHR) to cutting edge procedures, physicians must stay current on new technology - and

*new uses* for technology.

Spinal Cord Stimulation has been tremendously helpful in treating patients with chronic pain. The technology continues to evolve, although it is already well accepted and utilized with significant positive results. Recently, new applications for Spinal Cord Stimulation are making the medical industry take notice.

Frequent headaches have long been a significant problem for patients. One of the most powerful new uses of the technology is to combat debilitating headaches. By placing a stimulator lead beneath the skin at the occipital region of one's head, the device can reduce and even eradicate serious headaches.

After a successful trial, a stimulator lead can be connected to the typical battery utilized with spinal cord stimulation. This tiny generator is implanted, and serves as a power source for electrical impulses. These impulses are used to interrupt the mechanisms involved with the perception of pain and will provide relief for those who suffer from chronic headaches.

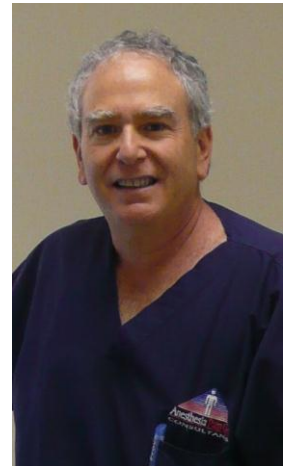
Physicians are finding that peripheral nerve stimulation has many other applications that can be utilized in various ways. For example, patients suffering from post-herpetic neuralgia have found relief through nerve stimulation. In fact, innovations in usage have led to hybrid stimulation, where leads in the spine (the traditional means of implementing spinal cord stimulation) are combined and supplemented with a peripheral stimulator. This can be used in various anatomical locations thus covering different painful areas that would not otherwise be impacted by spinal cord stimulation alone.

The advancements of Peripheral Nerve Stimulation, where electrodes are placed along the course of painful nerves, have made pain relief possible for many patients. Without invasive surgery and dependence on medication, these patients experience dramatic relief. The result is often a gentle tingling sensation; however the feeling is far more preferable than the pain from which they were originally suffering. The theory is that by stimulating the sensory pathways, the brain is occupied with that information so as to reduce the perception of otherwise present pain signals, therefore creating genuine relief.

There is a long list of conditions and syndromes where new applications of stimulators are appropriate. Back and neck pain, complex regional pain syndrome, peripheral vascular disease and diabetic neuropathy are often treatable employing this new technology. Even pain following hernia surgery has been relieved with Peripheral Nerve Stimulation.

Pain care is a complex and fast-evolving area of medicine. As a means of treating patients in severe chronic pain without associated complications from the overuse of medication, pioneering doctors and researchers continue to seek out and experiment with various methods. The results have been stunning in their effectiveness and ability to produce a positive outcome. Technology is forever changing, and the medical profession is consistently searching for new ways to apply it.

***Dr. Ira Fox founded Anesthesia Pain Care Consultants in June 1996. He has spent almost 25 years treating patients with acute and chronic pain. He can be reached at (954) 720-3188***



**Ira Fox, M.D.  
DABPM, FIPP, ABIPP**