Cryoablation

What is Cryoablation Lesioning?

Cryoablation involves freezing a nerve in hopes of interrupting the nerve's ability to send pain signals to the brain and provide pain relief. While cryoablation can be applied to various organs and tissues and is used in a variety of medical specialties, at Spine & Neuro Pain Specialists, it is primarily used to treat peripheral nerve pain.

What Does Cryoablation Treat?

At Spine & Neuro Pain Specialists, it is used to treat pain caused by peripheral nerves, most commonly occipital neuralgia. Although, other peripheral nerves can be treated.

How is Cryoablation Done?

The procedure is done in the operating room under fluoroscopy. The patient is given a local anesthetic and IV sedation. The doctor will insert a special needle into the target area. Prior to cryoablation, sensory and motor nerve testing is performed to identify the nerve and confirm needle placement. Once the nerve is identified with a nerve stimulation test, the nerve is treated by decreasing the temperature surrounding the nerve to -70 C. Nitrous oxide under pressure is expanded in a closed compartment to create the temperature of -70 C. The cooling of these nerves interrupts the pain messages before they are sent to the brain where the pain is actually perceived.

How Long Does the Pain Relief Typically Last?

While no guarantees can be made, pain relief from this procedure can last from six to twelve months or longer. This is because the nerve damage from the Cryoablation is typically only temporary. These nerves will repair themselves, and the time frame for this repair varies, as every individual patient is unique in their healing process.

Advantages

The greatest advantage is the potential for an extended period of pain relief. Patients who have received temporary pain relief from a nerve block only to have the pain return again, appreciate that the pain relief can last much longer. Recovery from this procedure is usually within one to two weeks. After one day of rest, most patients are able to resume their normal activities. This procedure can be repeated.

Disadvantages

As with any medical procedure, there are risks. Due to the fact that only needles are used for this procedure, the typical risks for bleeding and infection are very minimal. Some patients will experience increased discomfort that can last for 1-2 weeks following this procedure. Other risks, although rare, include, but are not limited to, no effect on pain, increased pain and permanent nerve injury.