

Radiofrequency Neurotomy Information for Facet Joint Pain

What is a medial branch neurotomy and why is it helpful?

A medial branch neurotomy is a non-surgical procedure which is lesions (burns) the nerves carrying the pain from your facet joint to your brain. It is likely, we have previously number the medial branch nerves as a "test" to see if you were a candidate for the neurotomy procedure*. The neurotomy prevents the pain signal from traveling through these nerves, thereby interrupting the pain signal to your brain. These medial branch nerves do control small muscles in your neck, mid, or low back, but a neurotomy will not permanently harm these muscles. If effective, the treatment should provide pain relief lasting at least 9-14 months and at times much longer.

What will happen to me during the procedure?

An IV will be started and we will give you adequate IV relaxation to keep you comfortable during the procedure. After lying on an x-ray table, the skin over your neck, mid back or low back will be cleansed. Next, the physician will numb a small area of skin, which may sting for a few seconds. The physician will use x-ray guidance to direct a special (radiofrequency) needle along side the medial branch nerves. A small amount of electrical current will then be carefully passed through each needle to burn the target nerve. This may briefly recreate your usual pain and may cause a twitch in your neck or back. The nerves will then be numbed to prevent pain while the nerve is being lesioned. The process will be repeated for 1-5 additional nerves. The entire procedure usually takes between 30-90 minutes.

What should I expect after the procedure?

On the day of the injection you should not drive and you should avoid any strenuous activities. On the day after the procedure, you may cautiously try to return to your regular activities, but most patients rest for an additional 1-2 days. Your neck or back will usually be very sore for the next two weeks. This pain is usually caused by muscle spasm and irritability from the heat lesion, which may take 7-21 days to subside. Your physician will give you medication to treat the expected pain. Pain relief usually is not experienced until about 3-4 weeks after the procedure when the nerves have completely died. On occasion, your back or neck may feel odd slightly weak for several weeks after the procedure.

The nerves will eventually grow back (regenerate) but the pain may or may not return. If the pain does return, you may want to have the procedure repeated (usually with equal success). Some patients never have a return of their pain, but we cannot predict when this will occur.

We are frequently asked, "If you remove my ability to feel these joints will I injure them or other parts of my back"? There is no scientific evidence to support this happening. In the many years that we have been following patients after medial branch neurotomy, we have not seen this occur.

There is a rare chance (less than 5%) that you may have increased nerve pain following the procedure for 1-3 months. This may include skin sensitivity or a sunburn sensation. It is treated with specific medications and usually resolves within several months. Increased nerve pain, however, is very common and to be expected following neurotomy at the C2-3 level of the neck. Symptoms include burning, itching and surface sensitivity in the skin behind the ears and base of the skull. These symptoms usually resolve in 3-5 weeks.