Radiofrequency Neurotomy Information for Sacroiliac-Joint Pain

What is a lateral branch neurotomy, and why is it helpful?
A lateral branch neurotomy is a nonsurgical procedure that lesions (burns) the nerves carrying pain from your sacroiliac joints to your brain. It is likely that we have previously numbed the sacroiliac joint(s) 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 lateral branch nerves do not control any muscles or sensation in your legs. If effective, the treatment should provide pain relief lasting at least nine to 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 the procedure comfortable. After you are lying on an x-ray table, the skin over your lower back and buttock 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 alongside the lateral branch nerves. A small amount of electrical current may then be carefully passed through each needle to assure it is next to only the target nerve. This may briefly recreate your usual pain. The nerves will then be numbed to minimize pain while the nerve is being lesioned. Several lesions are created at each level (L5, S1, S2, S3). The entire procedure usually takes between 60 and 90 minutes.

What should I expect after the procedure?
On the day of the procedure, you should not drive and should avoid any strenuous activities. On the day after the procedure, you may cautiously return to your regular activities; but most patients require an additional two days of rest. Your back and buttock will usually be very sore during the next several days. The pain will slowly improve over several weeks. This pain is usually caused by muscle spasms and irritability while the targeted nerves are dying from the heat lesion. Your physician will give you medication to treat the expected pain. Pain relief usually is not experienced until about two to three weeks after the procedure when the nerves have completely died. On occasion, your back or neck may feel odd or 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 sacroiliac 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 lateral branch neurotomy, we have not seen this occur.

There is a rare chance (less than 5 percent) that you may have increased nerve pain following the procedure for one to three months. This may include skin sensitivity or a sunburned sensation in the buttock. It is treated with specific medications and usually resolves within several months.