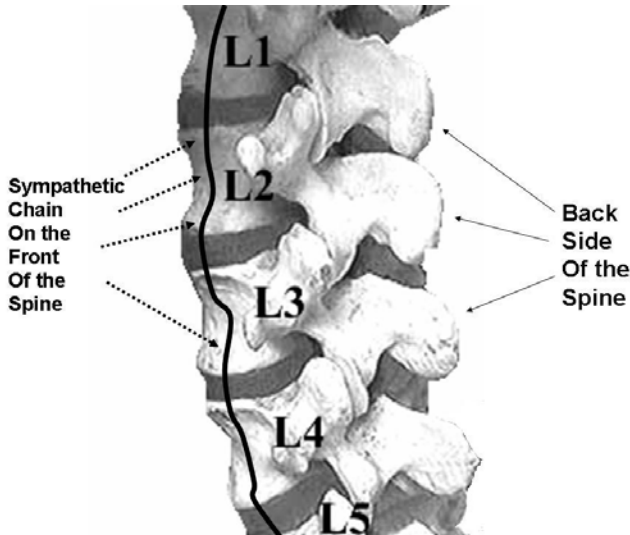


LUMBAR SYMPATHETIC BLOCK

➤ WHAT IS THE LUMBAR SYMPATHETIC CHAIN AND GANGLION?



The sympathetic nervous system is a primitive alternative nervous system that exists in our bodies and usually is outside our conscious control. It controls the amount of blood going through the arteries, the heart rate, breathing rate, etc. The lumbar sympathetic chain and ganglia are the lower end of this primitive nervous system that travels to the thighs, legs, and feet and can transmit some types of pain back to the spine. The sympathetic chain is located to

the front and sides of the vertebrae of the spine and run from the upper rib level down to the end of the coccyx (tailbone), then on into the legs and feet on blood vessels and with other nerves. In some diseases, the nerve signals going through this nerve chain are overactive and can be interrupted by injection of a local anesthetic onto this chain.

➤ FOR WHAT CONDITIONS IS THE LUMBAR SYMPATHETIC BLOCK

USED? *Foot and leg pain, reflex sympathetic dystrophy and other conditions transmitted by the sympathetic nervous system, peripheral vascular disease, some diabetic conditions, etc. The injections may be used as a diagnostic injection or in a series as therapeutic injections. However, if more than 3 injections are needed, it is prudent to consider other technologies such as spinal cord stimulation as a permanent alternative.*

➤ HOW IS THE INJECTION PERFORMED?

The injection is always performed under x-ray fluoroscopic guidance usually with minimal or no sedation. Failure to use fluoroscopy with iodinated contrast is inappropriate. After skin preparation and cleansing, a long but thin needle is inserted several inches to the side of the spine, angling towards the side and front of the spine. Once the appropriate location is reached, iodinated contrast is used to outline the sympathetic chain as shown on the right. Then local anesthetics (bupivacaine or lidocaine) are injected to interrupt the transmission of this nervous system. Onset of pain relief is nearly immediate if the



sympathetic nervous system is carrying the painful signals through this ganglion. . The patient is awakened, and determines any relief over the next 6 hours.

Over for More Information

- **DO THE INJECTIONS HURT?** *Typically the injection hurts only a small amount, however some physicians will elect to give sedation in selected instances.*
- **IF THE INJECTION WORKS, CAN IT BE REPEATED?** *Yes, it is possible to repeat the injection two or three times if there is significant relief of pain or other desired symptom relief from the first injection. A series of these blocks is a reasonable choice to desensitize the nervous system, but if more than 3 blocks are used in a 3 month time period, other alternatives need to be considered.*
- **SPECIAL INSTRUCTIONS: IF SEDATION IS TO BE USED-***Nothing to eat or drink after midnight on day of the procedure. Do continue to take all other medications with small sips of water on the day of the procedure **except those listed below.** You will need a driver afterwards that can stay in our lobby during the entire time you are in our facility.*
- **MEDICATIONS TO STOP BEFORE THE PROCEDURE:** Stop Plavix 7 days before the procedure Stop coumadin and warfarin 5 days before the Procedure. Stop Ticlid (ticlopidine) 14 days before the procedure.
- **RISKS:** Bleeding, infection, abscess, nerve injury, spinal cord injury, bowel injury, brief increase in pain, pneumothorax (collapsed lung), drop in blood pressure, numbness in the legs are all rare but can occur.
- **AFTER THE PROCEDURE:** *You will be in our clinic for about 20-30minutes after the procedure and should be able to drink juices and have a clear head before discharge. If you do not have sedation, you may drive yourself home*
- **DISCHARGE INSTRUCTIONS:**
 - **Activity:** Resume normal activity over the next day.
 - **Diet:** Resume normal diet
 - **Medications:** Resume normal medications unless otherwise instructed.
 - **Dressing:** You may have a small bandaid or bandaids placed over the injection site.

This can be removed the next day

- **Discomfort at the Injection Site:** Apply ice wrapped in a washcloth for short periods of time (20 minutes per hour) during the first 24 hours, then apply low to medium heat

- **IV Site:** There may be soreness and bruising around the IV site, which will go away in a few days. A warm moist cloth placed over the area for half-hour periods several times a day will sometimes help. Increased tenderness or red streaking around the area of the IV site or increasing swelling of the hand requires attention. Our clinic needs to be notified if this occurs

- **Side Effects:** If you experience new onset severe low back pain, new abdominal pain, shortness of breath, numbness in the legs, or a fever over 101.5 degrees, contact your physician immediately.