

Lumbar Sympathetic Blocks

1. What is a lumbar sympathetic block?

A lumbar sympathetic block is the injection of medication into the sympathetic nervous system at the lumbar level.

2. What is the sympathetic nervous system?

The sympathetic nervous system is responsible for the body's response to situations during times of stress or danger. For example, sympathetic nerves cause the heart to beat faster and adrenaline to be released in preparation for our response to a stressful situation. In addition, sympathetic nerve impulses cause the constriction of peripheral blood vessels (the arteries and veins in our arms and legs). The sympathetic nervous system is important for our physical protection.

3. How are sympathetic nerves involved with pain?

Sometimes a sympathetic nerve may be unnecessarily stimulated as a result of injury or other trauma to the body. In this situation, the involved sympathetic nerve will cause the blood vessels in the arm or leg to constrict and remain constricted resulting in poor circulation to that limb. The person may then experience pain and possibly swelling in the extremity, nail changes, unusual color of the skin, and temperature changes in the extremity. If the sympathetic nerve impulse is blocked, the blood vessels dilate, circulation is improved and pain relief may occur.

4. What conditions are treated with sympathetic nerve blocks?

The most commonly treated condition is Reflex Sympathetic Dystrophy (RSD) also unknown as Complex Regional Pain Syndrome (CRPS). These blocks may also be used in conditions in which increased circulation to a limb would be beneficial for healing as in diabetic neuropathy or slow healing wounds.

Sympathetic blocks may also be helpful in the diagnosis of certain conditions.

5. What can I expect during a lumbar sympathetic block?

Prior to a lumbar sympathetic block an IV is started so that you may be given IV sedation. You will be given supplemental oxygen through a nasal cannula. You will be connected to a monitor to observe your blood pressure, heart rate and rhythm and oxygen level.

Skin thermometers will be placed on your feet. The physician and nurse will observe the thermometers for an increase in temperature in the foot on the side that was injected. A rise in temperature indicates that the lumbar sympathetic block was successful.

For the procedure you will be placed on your abdomen. The physician will cleanse the skin with an antibacterial solution. The skin will be numbed with a local anesthetic. Using X-ray guidance, the physician will position the needle at the correct level in the lumbar sympathetic nerves. When the physician will inject contrast dye to ensure that the medication will flow to the areas that he feels would be most beneficial to you. When the

physician is satisfied with the needle placement and contrast dye flow, the medication will be injected.

The physician typically injects a combination of local anesthetic and steroid.

6. Are there risks with a lumbar sympathetic block?

As with any procedure, there is the potential for problems. You may experience bruising, swelling or inflammation at the injection site. You may also experience dizziness, or you may experience weakness or numbness in the leg on the side that was injected. More serious side effects though rare, include seizures, kidney damage, allergy to the medication or nerve damage.

7. What can I expect immediately after the lumbar sympathetic block?

The nurse will continue to monitor you for approximately one hour after the injection. This will include your blood pressure, heart rate, oxygen level and the temperature in your feet.

After a lumbar sympathetic block the temperature in your foot should increase. You will notice that your lower leg becomes rosy in color, feels warm and the blood vessels have dilated. The most important result is that the pain should decrease.

8. How should I care for myself after the lumbar sympathetic block?

You should take it easy on the day of the injection. Normally you may resume your normal activities the following day.

If the injection site is uncomfortable, you may apply ice to the injection site during the first 24 hours after the injection. After 24 hours, you may apply ice or heat if you wish. Whatever you choose to use, apply only 20 minutes at a time (20 minutes on/20 minutes off). Continuous use of ice or heat may damage your skin.

You may continue your pain medications as needed.

You should take your other medications as prescribed and continue your normal diet.

Please notify your doctor if you experience:

- ◆ Excessive bleeding at the injection site
- ◆ Dizziness or weakness
- ◆ Signs of infection at the injection site