Lumbar Sympathetic Plexus Block (LSPB)

What is a lumbar sympathetic plexus?

It is a complex network of nerves which controls the body's involuntary activities for the lower extremities. It has been implicated in neuropathic pain, vascular, and visceral pain. Lumbar plexus is located anterior to L2-L3 vertebral body.

What are the indications of LSPB?

Among many indications the listed are the main indications: vascular insufficiency, CRPS 1 or 2, neuropathic lower limb pain, cancer pain, rectal tenesmus from cancer, intractable back pain, diabetic foot ulcer (to improve healing, blood flow, and decrease pain).

How does LSPB bring pain relief?

The sympathetic nerve becomes hyperactivity due to chronic pain. With the LSPB is goal is to break the cycle of pain and decrease sympathetic outflow, and thus, allow more blood flow. This helps to desensitize the nerve fibers, increase blood flow, increase healing (due to increased blood flow) and decrease pain.
What are risks for the LSPB?

Among many, here are few listed: bleeding, intravascular injection, intrathecal or epidural injection, perforation of viscera, groin pain (genitofemoral nerve injury).

How is the LSPB injection performed?

After sterile preparation of the back region, the injection site if localized under X-ray. Following the local anesthetic applied to the injection site, which can help decrease the injection site pain, the needle is guided toward the target site (anterior to L3 vertebral body) with the help of X-ray. After the target is localized, it can be further confirmed with liquid contrast, which can help further confirm the location of the lumbar plexus. After the lumbar plexus is confirmed, the local anesthetic medication is injected, and the needle is taken out at the end of the procedure.

What to expect after the LSPB procedure?

This is an outpatient procedure. Patients are monitored in the recovery room after the procedure. Patient should receive instant relief after the procedure in 10-20 minutes. Patients are discharged from the recovery room once they have the discharge criteria.

How long the relief from the LSPB would last for?

It varies from patient to patient. Usually, the pain relief can last up to 4-6 weeks, and may require repeat the LSPB if necessary. The purpose is to desensitize the nerve fibers, decrease pain, increase blood circulation and increase healing.

Please tell your pain physician if you are taking any blood thinners. For example: Coumadin, Plavix, Heparin, Lovenox and etc. The blood thinners need to be stopped before the interventional procedure, and the time frame will be prescribed by your pain physician.