

LUMBAR SYMPATHETIC BLOCK FACT SHEET



Peter Mac
Peter MacCallum Cancer Centre
Victoria Australia

DEPARTMENT OF ACUTE & PERSISTENT PAIN

This fact sheet aims to answer some general questions about the lumbar sympathetic block. Please read the following information carefully. If you need further information, please ask your doctor or pain nurse.

What Are the Lumbar Sympathetic Nerves?

The lumbar sympathetic nerves are a group of nerves located on either side of the lower back. These nerves do not control feeling or movement; instead, they regulate other functions of the body, such as directing blood supply.

What Is a Lumbar Sympathetic Block?

A lumbar sympathetic block is an interventional procedure consisting of an injection that targets the lumbar sympathetic nerves to interrupt their ability to send pain messages to the brain.

Why Perform a Lumbar Sympathetic Block?

For various reasons, the lumbar sympathetic nerves may become injured or sensitised, which means that when it is stimulated, it results in pain in the lower limb. Some common conditions in which the lumbar sympathetic nerves may be affected

include persistent post-surgical pain and Chronic Regional Pain Syndrome.

Patients can require strong medication, such as opioids, and other medications that target nerve pain, in order to control this pain. However, these medications can also cause unwanted side effects like drowsiness, fatigue and constipation.

A lumbar sympathetic block can help to reduce the activity of the nerves, which in turn reduces pain. It is important to remember that the injection usually does not stop all pain, but it may lessen the need to use pain medication.

Most patients feel some, although not total, relief from pain after the procedure. The benefit of the lumbar sympathetic block varies from patient to patient, but it may last up to several months. A repeat lumbar sympathetic block can be considered.

What Happens Before and After the Procedure?

It is recommended that blood-thinning products be stopped prior to the procedure. You will be advised on the recommendation for your specific circumstances when we confirm your procedure. You will be able to continue taking all your other medications with a sip of water on the day of your procedure.

Please refer to the *Interventional Procedure Pre-Admission Fact Sheet* for further, detailed information.

What Happens During the Procedure?

A lumbar sympathetic block is performed under imaging guidance in the operating theatre or radiology department. The whole procedure usually takes 30 - 60 minutes. You may be sedated prior to the procedure.

Local anaesthetic will be injected under your skin to numb the discomfort of the block needle. A different local anaesthetic will then be injected to your lower back to the lumbar sympathetic nerves to numb the nerves. In some cases, the local anaesthetic solution will also contain a steroid. The steroid acts to reduce any inflammation or swelling around the nerves. Occasionally, a substance to permanently damage the nerves may be used (the damage to the nerves may result in longer pain relief).

What Are Possible Side Effects?

Any invasive interventions, including a lumbar sympathetic block, may cause complications that can be serious. By performing the procedure under imaging guidance and sterile conditions, we aim to minimise the risk of serious complications.

Common side effects include:

- Pain, tenderness, swelling or bruising around the injection
- Weakness, numbness, heavy sensation in affected limb
- Temperature increase in the affected area

Less common, but also possible complications:

- Infection (around the injection site internally or externally)
- Bleeding (around the injection site internally or externally)
- Allergic reaction to the dye or medicines injected
- Surrounding nerve or spinal block
- Injury to surrounding nerves
- Injury to surrounding organs
- Local anaesthetic toxicity
- Failure of injection