

# Lumbar Sympathetic block

## What is a lumbar sympathetic block?

The lumbar sympathetic nerves lie in front of the spine in the lower back and transmit signals from the lower part of the body to the brain.

A lumbar sympathetic block is an injection of medication given around these nerves to reduce pain in specific lower limb pain conditions, or other complex pain conditions.

## Why do I need this procedure?

This blocks can help treat/reduce chronic leg and foot pain that is not well controlled despite other pain medications/therapies. It can be both diagnostic (allows your physician to determine if the pain experienced is due to the lumbar sympathetic nerves) and therapeutic (provides pain relief).

This block is commonly (but not exclusively) administered for the following conditions:

- Complex regional pain syndrome (CRPS)
- Pain due to vascular insufficiency or ischaemic limb pain (pain due to inadequate blood supply)
- Phantom limb pain (after amputations)
- Painful diabetic or alcohol related neuropathy
- Herpetic neuralgia (Herpes Zoster infection in the lower limb region)



## What are the preparations?

Your pain specialist will review your history and examine you prior to deciding if lumbar sympathetic block is appropriate to address your pain.

Please provide your doctor with accurate and complete information regarding:

- Medical issues
- Current medications, especially blood thinners
- Allergies
- Previous procedures, and
- Pregnancy or possibility of pregnancy

Specific instructions regarding fasting and your medications will be given to you separately, and should be followed closely as this allows us to perform the procedure as safely as possible.

## How is a lumbar sympathetic block performed?

- This block is done with you lying face down on a table, and with the guidance of an X-Ray. You might be given some medication to reduce your anxiety and discomfort associated with the procedure.
- Your lower back is cleaned with an anti-septic solution, and a small needle is guided using an X-Ray to the lumbar sympathetic chain/nerves. Some contrast (dye that lights up on X-Ray) is injected to confirm accurate and appropriate placement of the needle.
- Local anaesthetic (numbing medication), with or without corticosteroids (anti-inflammatory), is then administered through the needle near the lumbar sympathetic nerves.



## What are the risks and complications of the procedure?

Lumbar Sympathetic blocks are generally safe, with a low risk of severe complications.

Common side effects:

- Bruising and soreness at the injection site
- Low blood pressure, giddiness
- Transient numbness and weakness of the lower limb



Rare but serious complications:

- Infection around the injection site
- Bleeding
- Inadvertent spinal or epidural block (difficulty breathing, numbness of the chest, trunk and limbs)
- Injury to surrounding nerves - resulting in anterior thigh pain syndrome or lower limb paralysis
- Injury of surrounding structures (kidneys, ureters)
- Severe drug allergies
- Local anaesthetic toxicity
- Seizures



## What can I expect after the procedure?

- You will be monitored for some time prior to discharge back home or to the ward. Your vital signs will be taken regularly and our nursing staff will discuss some post-procedure instructions with you.
- If you are being discharged home, you should be accompanied home by a responsible adult and you must not drive home by yourself.
- Some soreness is expected at the site of injection initially, but should improve. Keep the injection area clean and dry for the next 2-3 days.
- There might be initial temporary worsening of the pain prior to improvement after about 3-5 days.
- Your doctor will review you after the procedure to assess its effectiveness and counsel you regarding further management, which might involve a denervation (more permanent block) of the lumbar sympathetic nerves for longer-term pain relief.

## What are the other options?

Your pain specialist will discuss other therapeutic options to address your pain as indicated.

These may include medications, physiotherapy, psychological intervention, surgery, or a combination of any of these modalities.



Contributed by Department of Anaesthesia

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