

Lumbar sympathectomy – Information Leaflet

This leaflet tells you about Lumbar sympathectomy . It explains what is involved, and the common complications associated with this treatment. It is not meant to replace discussion between you and your doctor, but as a guide to be used in connection to what is discussed with your doctor.

What is lumbar sympathectomy? What are the intended benefits?

The sympathetic nerves run beside the spine. The lumbar sympathetic nerves in the lower back control the blood vessels in the legs, and carry some of the sensation of pain from the legs. Lumbar sympathectomy involves blocking the nerves on a temporary or on permanent basis.

Numbing the sympathetic nerves, particularly when it is related to problems in the blood supply to the legs, can help pain in the legs. Also, about 30% of patients having neuropathic pain (e.g. complex regional pain syndrome) have a phenomenon called ‘sympathetic maintained pain’. The block can alleviate their symptoms as well.

Before the procedure

It is unsafe to perform the injection on patients with clotting problems, or in those taking anticoagulants (warfarin). It is also dangerous to perform the injection when there is an infection of the abdomen or the skin of the back, or septicaemia.

The injection cannot be given to patients who are sensitive or allergic to the drugs and chemicals used. We put a dressing over the injection, and you should tell us if you are allergic to plasters, tapes or dressings.

You can continue your normal medicines, including your pain killers (unless advised otherwise by your doctor) prior to the procedure.

On the day of the procedure

Follow the instructions given to you by doctor about when last to eat or drink.

Take all your usual medication including your painkillers

Bring all your usual medication, or a list of what you are taking with you.

Make sure that someone will collect you, take you home, and is available to stay with you overnight.

The procedure

When the injection is performed, you will need to lie on your stomach for about 20 minutes. A small plastic cannula is put into a vein on your hand or forearm so that we can give medicines rapidly should they be needed.

An X-ray machine is used to take pictures of the injection. If there is any possibility of pregnancy, then we cannot perform the injection. The site of the injection is cleaned with cold antiseptic. A small injection of local anaesthetic (lidocaine), which stings for a few seconds, is used to numb the skin on either side of the middle of the back.

One or more needles are then pushed through the skin, on the side of the back, and carefully moved past the backbone to lie next to the sympathetic nerves. This may take a few minutes, and is sometimes uncomfortable.

The needles are checked by injecting a small amount of dye that shows up in the X-rays. The treatment is then injected. You may feel some warmth, a little discomfort, or some numbness.

During the first stage, we usually start with a test, injecting a local anaesthetic (bupivacaine) and sometimes a steroid to reduce inflammation around the nerves. This test will show that the pain can be treated by turning off the sympathetic nerves. The help is temporary, although in some patients it gives longer-lasting relief.

If the pain is helped but returns then you will be asked to return for a long-lasting treatment. This is done in the same way, but the injection includes a chemical (alcohol or phenol) or heating (radiofrequency) that will stop the sympathetic nerves for a longer period. The injection will last for several months until the nerves grow back.

What to expect after the procedure?

The legs may feel warm and weak. The pain relief may not be apparent immediately. In fact, there can be a temporary exacerbation of pain (because of the needles) before you appreciate any benefit.

After the procedure you will be monitored for about 30-60 minutes and then sent home. You may feel weak or tired for a little while and so we advise that you rest for 24 hours. During this time you should not: drive a car or operate equipment, sign any legal documents or drink alcohol. You should continue taking your usual medication and the next day you may take a bath, or shower, and remove any plasters.

If there is unbearable exacerbation of pain, unusual redness, discharge or swelling at the site of injection or persistently high temperature – you have to contact the doctor or your general practitioner immediately.

Are there any problems with the treatment?

The most common problem is a drop in blood pressure and a feeling of faintness after the injection.

The most serious problem is damage to nearby organs from spread of the injection beyond the sympathetic nerves. The nerves to the groin can be affected in up to 10% of patients, and sometimes become painful themselves for a few weeks.

The rare problems occurring after long-term treatment include paralysis of the legs, unpleasant sensations in the legs, impotence and bladder incontinence.