

Lumbar Transforaminal Epidural Injections

(Also known as 'Nerve Root Block' and 'Dorsal Root Ganglion Block')

Sciatica is a type of nerve pain that can commonly cause pain down one or both legs. Sciatica sometimes can also causes numbness or tingling down your leg. It is often caused when your sciatic nerve is irritated. Symptoms usually improve within a few months. Current National Guidelines recommend considering epidural injections in people with acute and severe sciatica. A transformational epidural is an injection around the nerve root as it leaves the spine performed under x-ray guidance. The most commonly used drugs injected are corticosteroids with or without local anaesthetic which may help to reduce and inflammation and pain around the nerve.

Benefits

Pain relief: Pain relief is variable and can be short-lived. Some people may get significant and lasting pain relief of up to half or more at 4 months following injection.

Risks

Common: between 1 in 10 and 1 in 100 people are affected

Tenderness and/or bruising: Mild local tenderness and / or bruising at the site of the injection, that usually settles over the first few days

Pain: Injection treatments are not always effective and may not help you pain.

Uncommon: Between 1 in 100 and 1 in 1,000 are affected

Numbness and/or weakness: The local anaesthetic may rarely spread casing some numbness and/or weakness in your legs and other areas. Should this occur, the effect is temporary and will rapidly resolve over minutes or rarely hours

Rare: Between 1 in 1,000 and 1 in 10,000 people are affected

Infection: This is rare. You should seek medical help if there is local warmth or redness over the site of injection with tenderness and/or you feel hot and unwell. This may require antibiotic treatment.

Headache: On rare occasions the needle may be placed too far and spinal fluid (CSF) encountered. This is called a dural puncture and may lead to headache that requires further treatment. If a severe headache does develop following your injection, take some paracetamol, drink plenty of water and lie flat. If the headache continues for more than twenty-four hours please contact your GP.

Allergy: Injected dye, local anaesthetic and/or steroid may rarely cause an allergic reaction

Very Rare: Fewer than 1 in 10,000 people are affected

Nerve injury: There are important nerves in the spine, but serious nerve injury is very rare (less than 1 in 10,000 cases). Injury to nerves that supply muscles to your leg can lead to foot drop for lumbar injections causing you to be unable to lift your foot up. Great care is taken during the procedure to avoid this very rare complication by placing the needles carefully under x-ray and only treating the nerves when the doctor is confident that they are in the right position

Potential side effects of corticosteroid:

Flare Up: Occasionally people notice a flare in their pain within the first 24 hours after an injection. This usually settles on its own within a couple of days. Use your usual pain killers to relieve symptoms.

Thinning of skin: Occasionally some thinning of the skin or dimpling skin colour change may occur at the injection site. This is more likely to happen if you have a higher dose of steroid.

Facial flushing: Steroid injections may sometimes cause facial flushing or interfere with the menstrual cycle making them irregular temporarily. However you should consult your GP if concerned, or if it persists.

Mood change: Any treatment with steroids may cause changes in mood – either elation or depression. This may be more common in people with a previous history of mood disturbance. If you have concerns please discuss this with your doctor.

Change in glycaemic control: People with diabetes may find that the steroid injection affects their blood sugar control; sometimes you may notice a temporary blood sugar rise. It is recommended that you check your blood levels more regularly; it may take between 1-3 weeks for them to settle.

References

1. Manchikanti L, Pampati V, Bakhit CE, Pakanati RR. Non-endoscopic and endoscopic adhesiolysis in post lumbar laminectomy syndrome: a one-year outcome study and cost effectiveness analysis. *Pain Physician*. 1999; 2(3):52-58
2. Manchikanti L, Pampati V, Fellows B, Bakhit CE. The diagnostic validity and therapeutic value of lumbar facet joint nerve blocks with or without adjuvant agents. *Current Review of Pain*. 2000; 4(5):337-344
3. NICE '17. Low back pain and sciatica in over 16s
4. Nicolaou A and P.R. Wilkinson. Professional Standards Committee of the Faculty of Pain Medicine.