

Cervical Transforaminal Epidural Injections

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

'Brachialgia' is a type of nerve pain commonly causing pain down one or both arms. This can sometimes be associated with numbness or tingling. It is often caused when a nerve is irritated. Symptoms usually improve over the course of a few months. Some people may benefit from an epidural injection when other measures have not helped. 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 inflammation and pain around the nerve.

Benefits

Pain relief: Pain relief is variable and can be short-lived. Up to 4 in 10 patients report at least reduced arm pain by a half for 4 weeks. Some people may experience longer lasting pain relief up to 12 months.

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 causing 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 arm can lead to weakness. 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

Unknown: Serious events have been reported anecdotally but it is not possible to comment on their true incidents

Damage to the blood vessels and / or spinal cord: This could lead to blood clots, seizure, stroke, paraplegia or death.

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. Nicolaou A and P.R. Wilkinson. Professional Standards Committee of the Faculty of Pain Medicine.
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3. Engel A, King W, MacVicar J. 2014. The Effectiveness and Risks of Fluoroscopically Guided Cervical Transforaminal Injections of Steroids: A Systematic Review with Comprehensive Analysis of the Published Data. *Pain Medicine* 15: 386 - 402