

Cervical Spinal Injections (As Treatment or Diagnostic)

1. Injection is a Mixture of Local anaesthesia & Steroid medication (Dexamethasone); Steroid act like a strong local anti-inflammatory medication).
2. Done as day case under X-ray control. Need Assistant and Transport following Injection.
3. Require careful mobilisation for first 12 hours. May need off work for 48 hours.
4. Steroid medication usage for Spinal Injection is an Off-Label use. Off-label use meaning - use of an approved product in a scenario that is not included or is disclaimed in the product information. Examples include use for a different indication, in a different patient age range-group, different dose or different route of administration to that which is approved by authorities.

Intended Benefits -

1. To reduce pain - (Right & Left sided - Radicular pain to hand, forearm & arm / Referred pain to Shoulder blade & Shoulder area / Neck Pain)
 - a. Cannot guarantee the amount or the duration of the pain relief.
 - b. Average Pain relief - Could vary from 30% to 90%; Vary between patients and different episode of injection.
 - c. 1/3rd have Long-term pain relief, 1/3rd get Short Term pain relief for 2 to 12 months, 1/3rd get pain relief < than 6 weeks or No Pain relief.
2. To diagnosis the source of the pain such as the level of the nerve root compression

This is overall a safely carried procedure with great cautions. Most of the risks are very small & temporary. However, there are rarely reported serious risks in the literature.

Frequently occurring risks are -

- Pain, Discomfort & Pressure during the Procedure under Local Anaesthesia. Procedure duration about 15 to 30 minutes
- Neckache or Stiffness / Headache
- Vasovagal reaction / dizziness
- Transient neurologic deficits due to nerve block from local anaesthesia used or irritation or minor injury to the nerve roots resulting in aggravated pain, tingling, numbness, or weakness of the arm / forearm / hand / fingers (can last 6 hours to 24 hours in most cases).
- Failure to improve the Upper limb or Neck or Occiput pain as anticipated; Duration of Pain relief was temporary or of short duration.

Rare occurring risks are -

- Side effects of Steroid injection (1 to 2%)
 - a. "Steroid flush" (red flushing of the face & chest) (1 to 2%); An increase in warmth or temperature for a few days. (Common)
 - b. Sleep disturbance & Anxiety; Feeling Hyperactive or Tired (for few days) (Common)
 - c. Increase in blood sugar in patients with diabetes (needs effective sugar control & regular monitoring of blood sugar for at least 4 to 6 weeks after injection)
 - d. Possible reduction in immune system for a few weeks, leading to increased susceptibility to infection. To Avoid exposure to infection & travelling to countries where infection risk is high for 5 weeks post injection. **During the Corona Virus Pandemic, we need to take extra precautions as it can result in increased vulnerability to this virus infection. The severity of the infection could become dangerous with serious consequences as explained in Covid Informed Consent** (if you contract it or if you are having the infection).
 - e. Menstrual cycle changes or increase Menstrual bleeding (in women); Water retention.
- Allergy to the medications, preservative & the contrast (dye) used; Puncture to spinal membrane causing spinal fluid leak & Headache for few weeks

Very rare possible serious risks (None in my practice) –

- Permanent Damage to Nerves – Mild or Severe (<0.05) - resulting in numbness & weakness of both Arm / Forearms, Hands / Fingers
- Permanent Damage to Spinal Cord (< 1 in 100,000) - resulting in numbness & weakness of all 4 limbs, truck, bowel & bladder (paraplegia) (unlikely with Dexamethasone steroid used)
- Damage to Blood Vessels to the Brain – resulting in Brain damage / Stroke; Transient amnesia.
- Blood clots in leg (deep vein thrombosis about <0.1%) & dislodging to the lung (pulmonary embolism).
- Infection (1 in 10,000 or 0.01%); Bleeding (very rare) which could Nerve or Spinal cord damage increase the risk of numbness, weakness and paralysis.
- Necrosis of the femoral head of hip joint (very rare), Fluid collection / Oedema under the retina of the eye (Central serous retinopathy)
- Death (Extremely rare). Currently the risk could be **higher with Covid-19 Pandemic**.

If done under sedation

1. Please Fast for 6 hours before procedures. Small sip of clear plain water allowed until 2 hours before injection. There could be some side effects such as nausea, vomiting & drowsiness.

