

CT Guided Spinal Injections

What is a CT guided spinal injection?

Computer Tomography (CT) Guided Spinal Injections are injections at or near the spine performed under CT guidance. These injections are used to treat neck, back and leg pain that is not responding to other forms of treatment.

There are three main types of injections depending on where the needle is placed. Each of these is described below:

1. Facet Joint Injections: Injections into the sliding joints at the back of the spine.
2. Perineural Injections: Injections next to the nerves of the neck or lower back as they exit the spine.
3. Epidural Injections: Injections into the space surrounding the nerve sac in the spinal canal in the lower back.

These injections are performed using a special CT Fluoroscopic technique which enables the safest and most accurate needle placement.

As back pain can have many different causes, occasionally these injections are performed to actually diagnose the cause of pain.

What preparation is required?

No preparation is needed.

What documentation is required?

Bring your referral and any relevant previous x-rays for comparison.

Also bring your Medicare card, Pension or Healthcare Card or Veteran's Affairs card details if applicable.

What you need to tell us prior to your appointment

At the time of arranging your appointment, please advise us if you are a diabetic, if you may be pregnant, if you have any allergies or a recent history of peptic ulcers. Also advise if you are taking any blood thinners.

What will happen during the procedure?

You will lie on the CT table on your stomach. The Radiologist will clean the skin in the area to be injected with special antiseptic. The Radiologist will be standing next to you controlling the CT and will guide a very fine needle to the exact location to be injected using the CT Fluoroscopy Screen in the room.

The Radiologist then injects steroid with/without local anaesthetic. The steroid used acts to reduce inflammation which is irritating the joint or nerve, and the local anaesthetic reduces transmission of pain through the nerve fibres. Some relief may be given by the local anaesthetic but the steroid takes several days to be most effective.

What long will the examination take?

The procedure usually takes 15 to 30 minutes depending on the number of joints or nerves to be injected.

Should you continue to take your medication?

Please keep taking your usual medications.

However, if the injection has given you instant relief then discuss with your Doctor if you should continue your usual pain medications.

Are there any risks?

You will receive a small dose of x-ray radiation during the procedure. CT uses x-rays to produce 2D and 3D images. The amount of radiation used is kept to an absolute minimum. Your radiologist performs many of these injections and is with you during the examination.

Please advise the radiographer if you are, or think you may be, pregnant.

Risks

Although not common, possible risks include:

- Bleeding, though rare, can occur into the injection site, causing pressure. This may require further treatment to stop.
- Infection, which is rare, can also occur.

What happens with the images and reports?

A report will be provided directly to your referring doctor.

We will store digital copies of all studies and reports on our secure patient information system for comparison with any future examinations.

- Possible transient leg weakness, loss of strength and/or sensation of legs or arms.
- If the fluid sac around the nerves is punctured, this can lead to a fluid leak that results in a headache. This usually settles over a few days with bed rest and analgesia. Only rarely does this require further treatment.
- Spinal cord injury with transient or permanent paralysis is very rare.
- Allergy is considered to be rare.
- Seek medical advice if unusual symptoms persist.

How long will the treatment last?

The effect varies for individual to individual. In some people the relief is instant. For others there may be relief for months to years. Some people require a second injection at least two weeks later. Still others get little or no benefit.

What can you expect after your examination?

When the injection is performed you may experience some burning or discomfort, but this will only last for a few minutes. If you do experience this transient pain, let the Radiologist know if this is your usual type of pain as this information could be important.

After the procedure you may get some soreness at the needle site, or alternatively numbness. Both these after effects will be temporary, and may last for several days but will settle in a short time.

Rarely, you may get a flare-up of your symptoms lasting several days, but this too will settle in a relatively short time.

Allergies to the steroid or local anaesthetic are extremely rare.

If you are a diabetic, the steroid may cause a temporary increase in your blood sugar levels.

After the procedure you will be asked to monitor and record your subsequent pain levels on a scale of 1 to 10. Please take this record to your referring Doctor. If you experience only limited improvement you may need a further injection.

Warning: Post procedure a driver is required as there may be some numbness in an arm or leg after the procedure.