

This fact sheet relates to **epidural injections**, a type of pain relieving injection which is performed at Melbourne Radiology Clinic. The injection relieves pain by delivering pain reducing medication to the affected area. A CT (Computed Tomography) scan will be used to guide the procedure.

## Introduction

Epidural injections are used to treat neck, back, arm and leg pain, depending on which level the needle is placed and exactly where in the epidural space.

### The three main types of epidural treatment are:

1. An **interlaminar epidural** is used to mainly treat the lower back at a specific level.
2. A **caudal epidural** is used to treat back pain and sciatica and targets multiple levels at once. This procedure is therefore useful in patients who have multiple levels that contribute to their pain.
3. A **transforaminal epidural** is when the injection is delivered to a specific nerve root to assist in relieving sciatica and is similar to a selective nerve root block/perineural injection.

## Preparation

- There is no specific preparation required.
- It is essential that Melbourne Radiology Clinic knows in advance of any blood thinning medication. These must be stopped prior to the procedure (**Aspirin and Warfarin for 5 days, Plavix for 7 days & Iscover for 8 days**).
- We strongly recommend that you bring a responsible person to drive you home afterwards.

## Risks

Risks of spinal procedures are rare and include:

- **Infection:** most of these are minor (1-2%), however can be serious (<0.1%) requiring hospital admission, intravenous antibiotics and surgery.
- **Bleeding:** this is fortunately also rare and common in patients with bleeding disorders and on “blood thinning” medication.
- **Nerve damage:** from direct needle trauma, or as a consequence of the above mentioned complications.
- **Dural puncture:** this is when the needle penetrates into the sac encasing the nerves within the spinal canal, causing leakage of fluid contained within the sac, known as CSF (cerebrospinal fluid). The risk of this procedure is approximately 1% and is treated with flat bed rest for four hours.

## Procedure

A series of planning images are performed, with the area of needle entry planned on the computer terminal and then marked on your skin. The radiologist will then clean your skin with an antiseptic wash and inject local anaesthetic into the injection site. This results in a stinging sensation which is temporary until the skin becomes numb, usually taking 10-30 seconds.

A fine needle is then passed through the skin and tissues, constantly manipulated under CT guidance until it enters the intended epidural space.



Gas or contrast is then injected to confirm the correct depth of the needle, which may result in some transient back pain. Once confirmed, a mixture of cortisone and local anaesthetic is injected, which often results in an increased pressure sensation within the back and/or leg pain, usually described as a burning sensation. The cortisone decreases the inflammation in the epidural space which is responsible for your symptoms.

## IMPORTANT INFORMATION TO TELL YOUR DOCTOR PRIOR TO TREATMENT

Serious side effects are rare, however if you have an existing condition, this must be discussed with your referring doctor before having treatment. People with local skin or systemic infections are at greater risk of having an infection spreading into the spine after spinal injection treatment. Therefore, if you have a skin infection, which may include wounds, boils or rashes, please tell your doctor or arrange to have the procedure performed at a later date.

## Following the procedure

At most, you will feel some minor discomfort in the back. As local anaesthetic has been injected into the spine, most patients will be pain free, however the local anaesthetic that has also been administered into the epidural space frequently comes into contact with adjacent nerves and may result in your arm or leg (depending on whether the nerves in the neck or lower back have been injected) feeling numb, heavy, clumsy, weak or even cold. This usually reverses in approximately 20-40 minutes.

Most patients are observed in the clinic for at least 30 minutes and are discharged after this point only if walking safely and feeling well. You should not drive for the rest of the day. The following day you may return to work and gradually increase your activities.

### Note:

Please discuss any medical illnesses with your doctor before booking the recommended procedure.

### Follow up

The radiologist conducting the spinal injection will send your referring doctor a report. Please ensure that you make a follow up appointment with your referring doctor or health care provider to discuss your results.

### REMEMBER ...

- Please bring to the clinic, any prior scans (eg. X-rays, ultrasounds, MRI, CT) and reports as these will assist the radiologist in assessing your condition.
- If you have any further queries please call Melbourne Radiology Clinic on **(03) 9667 1667** – we are only too happy to help.
- Please note that any referral for a scan is valid at Melbourne Radiology Clinic, even if it has been written on a referral form from another radiology provider.

Whilst every effort is made to keep your appointment time, the special needs of complex cases, elderly and frail patients can cause unexpected delays. Your consideration and patience in these circumstances is appreciated.

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