EPIDURAL INJECTION FACT SHEET

DEPARTMENT OF ACUTE & PERSISTENT PAIN

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This fact sheet aims to answer some general questions about the epidural injection. Please read the following information carefully. If you need further information, please ask your doctor or pain nurse.

What Is the Epidural Space?

The spine consists of the spinal bones (the vertebral column), with the spinal cord running through the middle of the column. The spinal cord is encased in a thin, membranous sac. The space between the outer surface of the sac and the spinal bones is called the epidural space. The spinal cord gives off nerve roots along the spinal column; these nerve roots are found in the epidural space.

What Is an Epidural Injection?

An epidural injection is an interventional procedure consisting of an injection that targets specific nerve roots to interrupt their ability to send pain messages to the brain.

Why Perform an Epidural Injection?

For various reasons, nerve roots may become irritated, which result in pain as well as numbness, weakness, or tingling in the affected area (such as the neck, back, upper or lower limb). Some common conditions in which specific nerve roots may be affected include spinal tumours.

Patients can require strong medication, such as opioids, and other medications that target nerve pain, in order to control this pain. However, these medications can also cause unwanted side effects like drowsiness, fatigue and constipation.

An epidural injection can help to target specific nerve-related pain. It is important to remember that the injection usually does not stop all pain, but it may lessen the need to use pain medication and allow patients to participate more fully in physical therapy, allowing them to become more active.

Most patients feel significant, although not total, relief from pain after the procedure, although it may take up to two weeks to experience relief. The benefit of the epidural injection varies from patient to patient, but it may last up to several months. A repeat epidural injection can be considered.

What Happens Before and After the Procedure?

It is recommended that blood-thinning products be stopped prior to the procedure. You will be advised on the recommendation for your specific circumstances when we confirm your procedure. You will be able to continue taking all your other medications with a sip of water on the day of your procedure.

Please refer to the *Interventional Procedure Pre-Admission Fact Sheet* for further, detailed information.

What Happens During the Procedure?

An epidural injection is performed under imaging guidance in the operating theatre or radiology department. The whole procedure usually takes 30 - 60 minutes. You may be sedated prior to the procedure.

Local anaesthetic will be injected under your skin to numb the discomfort of the epidural needle. A different local anaesthetic will then be injected into the epidural space in the upper, mid or lower back (depending on the corresponding pain) to numb the nerves. Often, the local anaesthetic solution will also contain a steroid. The steroid acts to reduce any inflammation or swelling around the nerves. In some cases, a strong pain-killer may also be in the solution.

What Are Possible Side Effects?

Any invasive interventions, including an epidural injection, may cause complications that can be serious. By performing the procedure under imaging guidance and sterile conditions, we aim to minimise the risk of serious complications.

Common side effects include:

- Weakness, numbness, heavy sensation in affected limb
- Headache
- Nausea/vomiting
- Pain, tenderness, swelling or bruising around the injection
- Muscle spasm at the area of injection
- Low blood pressure

Less common, but also possible complications:

- Infection (around the injection site internally or externally)
- Bleeding (around the injection site internally or externally)
- Allergic reaction to the dye or medicines injected
- Local anaesthetic toxicity
- Injury to surrounding nerves
- Damage to the spinal cord and paralysis
- Failure of injection