

# INTERCOSTAL NERVE BLOCK FACT SHEET



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

### What Is an Intercostal Nerve?

The intercostal nerves are located underneath each rib and control sensation to the chest wall and the lining of the lungs.

### What Is an Intercostal Nerve Block?

An intercostal nerve block is an interventional procedure consisting of an injection that targets the intercostal nerve corresponding to the particular location of pain to interrupt its ability to send pain messages to the brain.

### Why Perform an Intercostal Nerve Block?

For various reasons, a particular intercostal nerve may become injured or sensitised, which means that when it is stimulated, it results in pain in the chest wall. Some common conditions in which an intercostal nerve may be affected include Chronic Regional Pain Syndrome following breast surgery and shingles.

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 intercostal nerve block can help to reduce the activity of the nerves, which in turn reduces 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.

Most patients feel some, although not total, relief from pain after the procedure. The

benefit of the intercostal nerve block varies from patient to patient, but it may last up to several weeks. A repeat intercostal nerve block 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 intercostal nerve block 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 block needle. A different local anaesthetic will then be injected to the area underneath your rib along your back to the intercostal nerve to numb it. Often, the local anaesthetic solution will also contain a steroid. The steroid acts to reduce any inflammation or swelling around the nerves. More than one rib (nerve) can be targeted.

## What Are Possible Side Effects?

Any invasive interventions, including an intercostal nerve block, 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:

- Pain, tenderness, swelling or bruising around the injection

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
- Surrounding nerve or spinal block
- Injury to surrounding nerves
- Injury to surrounding organs
- Local anaesthetic toxicity
- Failure of injection