Spinal and epidural blocks are methods of numbing the lower body from the level of the abdomen down to the toes. They are used in various types of operations in bowel surgery, urology, obstetrics, and on the lower limbs.

A spinal block is a single shot of low dose anaesthesia into the lower back to achieve this numbness. It lasts several hours, and it is usually suitable for a single operation (e.g. hip replacement).

An epidural block is a slightly more superficial injection followed by the placement of a fine tube (catheter) around your spinal nerves. This is used to deliver continuous anaesthesia for an operation, and ongoing pain relief for up to 72 hours thereafter.

Epidural blocks are used in up to one third of labouring women in maternity units throughout Australia. Both methods of blocks can be used alone or together with general anaesthesia for your operation.

Common reasons these procedures

- Superior and longer lasting pain relief compared to standard analgesics alone.
- Improved recovery time compared to general anaesthesia.
- Minimise the need for intensive care for some by avoiding a general anaesthetic.

What will it feel like?

The preparation involves cleaning, draping, and numbing the skin of your lower back. You will feel a cold sponge followed by a small sting in your back. A blunt sensation of pushing would then follow as your anaesthetist locates the correct spot for the injection. You may be asked to lean further forward to assist in this.

When a spinal block is injected, you will experience a tingling sensation and warmth down your back and to your legs in a matter of 1 to 2 minutes. An epidural block is more gradual. It may take 10 to 15 minutes before a labouring woman would experience adequate relief.

In either case, your anaesthetist will test the level of numbness, usually with an ice cube.

The numbness would be associated with the inability to move your legs or to control your bladder. A urinary catheter may be placed into your bladder. There will be no discomfort as the block takes into effect.

Depending on the level of difficulty, your body shape, and your ability to remain comfortably still, the procedure would take between 10 to 30 minutes.

Determining your suitability

To minimise risks and side-effects, your anaesthetist will conduct a thorough series of questions. Please indicate if any of the following conditions apply to you.

- Some pre-existing back conditions.
- Bleeding disorders, or the recent use of blood-thinning medications.
- Infections - either at the skin level, or if you are unwell with infections elsewhere.
- Heart valve disorders
- Serious allergies or reactions to the essential ingredients for the block.

Cited references are listed at www.doctorchugosford.wordpress.com/spinal-epidural ©2017
What side effects are there?*

<table>
<thead>
<tr>
<th>Common side effects</th>
<th>Rarer complications</th>
<th>Estimates of very rare complications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Some itchiness 30-60%</td>
<td>Headache 1%</td>
<td>Infection: 1 in 100,000</td>
</tr>
<tr>
<td>Shivering 28%</td>
<td>Spinal failure of block &lt;1%</td>
<td>Severe bruising (epidural haematoma) 1:190,000 epidurals</td>
</tr>
<tr>
<td>Epidural needing top-up 10-20%</td>
<td>Severe drug allergy/reactions &lt;1%</td>
<td>Permanent harm</td>
</tr>
<tr>
<td>Back pain 12%</td>
<td></td>
<td>1 in 23,500 (spinal)</td>
</tr>
<tr>
<td>Vomiting 7%</td>
<td></td>
<td>1 in 50,500 (epidural)</td>
</tr>
<tr>
<td></td>
<td>These common symptoms will cause</td>
<td>Paraplegia or death</td>
</tr>
<tr>
<td></td>
<td>discomfort, but are usually without</td>
<td>1 in 54,500 (spinal)</td>
</tr>
<tr>
<td></td>
<td>lasting consequences.</td>
<td>1 in 141,500 (epidural)</td>
</tr>
</tbody>
</table>

*Incidences of serious and permanent injuries are exceedingly rare, numbers are estimates only. Side-effect profile varies for each individual, depending on age, size, health, and surgical needs. Studies have shown about two-thirds of all injuries, even serious ones, will fully resolve or show major improvement within 6 months.

Delayed side-effects

Some of the side effects listed above may only begin to manifest in the days after the block has worn off. Report any of the following to your hospital facility if not resolving over the following days.

- Persistent numbness, weakness, tingling, or difficulty passing urine
- Back pain in the area where the spinal/epidural injection that had taken place.
- Persistent headache, that is usually worse in the upright position.
- Recurrent fevers.

Spinal and epidural blocks are voluntary options for your anaesthetic care. This information page and any discussions with your anaesthetist serve as part of an informed consent process.

Cited references are listed at [www.doctorchugosford.wordpress.com/spinal-epidural](http://www.doctorchugosford.wordpress.com/spinal-epidural) ©2017