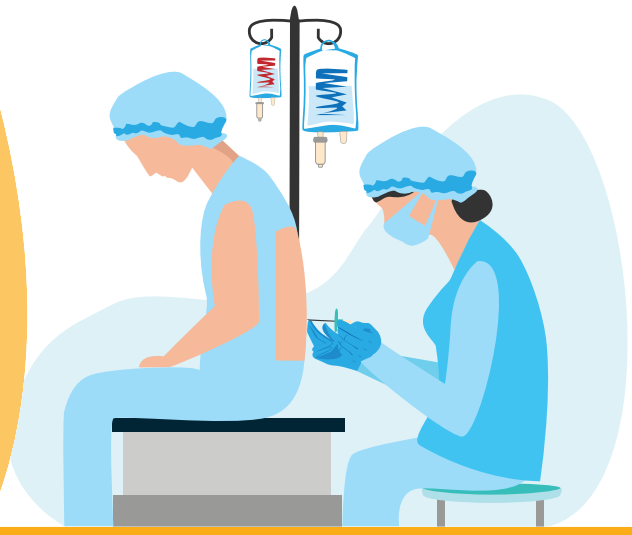
Epidural and Spinal Anaesthesia and Analgesia



If you need to undergo an epidural or spinal anaesthetic, preparation will help ensure that the experience is a positive one.

This pamphlet will:

- Provide you with general information about epidural and spinal anaesthetics
- Encourage you to ask questions of your anaesthetist
- Help you approach the planned procedure positively

If you have any further questions, you should ask your specialist or relevant health professional.

You are in good hands

Australia is one of the safest places in the world to have an anaesthetic. Specialist anaesthetists in Australia are highly trained medical specialists. They have gone to medical school, completed an internship and spent at least five years undergoing specialist anaesthetic training. Training includes anaesthesia, pain management, resuscitation and the management of medical emergencies.

What are Epidurals and Spinals?

Epidurals and spinals, commonly referred to as 'blocks' by anaesthetists, work to block the sensation of pain and produce temporary numbness. This enables surgery to be performed. They can also be used to provide pain relief for trauma, childbirth or after an operation. Epidurals and spinals can also be performed safely in children. Both epidurals and spinals involve the injection of local anaesthetic and other medications into the spaces around the spinal cord, however the techniques have some differences.

Spinal Anaesthesia is almost always a single injection of a small dose of local anaesthetic, often combined with other medications, through a very fine needle into the fluid surrounding the spinal cord. This results in numbness of the lower body. Often there is temporary paralysis or inability to move the legs, lasting 1-6 hours. How long a spinal lasts and the degree of paralysis will depend on the medications and doses used. Spinals are often used for surgery in the lower abdomen, pelvic region or legs. Spinals can also provide effective postoperative pain relief.

Epidurals involve the insertion of a needle and a small flexible plastic tube, known as an epidural catheter, into the fatty space that surrounds the spinal cord and spinal fluid.

Local anaesthetic in combination with other medicines can be used. Epidurals can be inserted anywhere along the spine from the neck to lower spine and can produce numbness and temporary paralysis. They can be used for surgery in the chest, abdomen, pelvic region and legs. An epidural catheter allows for a continuous flow of medications to produce continuous pain relief. This is especially useful for pain relief in the postoperative period, during labour, for diagnostic reasons in patients with complex pain problems and for pain relief for chest or abdominal trauma. Epidural catheters can be left in the body for some days after insertion.

In some cases, spinal anaesthesia and epidurals can be combined.

Before the Procedure

Your anaesthetist will want to know about your medical history. This may include seeing them in their rooms or a telehealth consultation before the date of your surgery. You might need further tests or consultations with other medical and health specialists before your surgery. Although these tests and investigations may delay your surgery, having you in the best condition prior to surgery is crucial to a successful outcome and to your long-term health.

Most epidurals and spinals are inserted whilst you are awake or lightly sedated. Spinals and epidurals can be combined with general anaesthesia (being fully 'asleep') or sedation ('twilight anaesthesia'). Your anaesthetist will discuss this with you before surgery.

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Your medications

Most medications can continue up until surgery. Blood thinners and diabetic medication require special consideration and you will be given specific instructions on what to do with these medications. If you are unsure, please ask your surgeon or your anaesthetist.

Preparation

Before your surgery, you will need to fast and not consume food or clear liquids. Generally, this is no food six hours prior to surgery and no clear liquids for two hours, however your anaesthetist will discuss this with you before the procedure.

What to expect

The epidural or spinal will usually be inserted while you are awake or lightly sedated. You may be asked to lie on your side or to sit up, depending on the preference of the anaesthetist and other factors. Local anaesthetic is injected into a small area of the skin on the back to numb the area and a special needle is inserted through the numb area.

If you are having a spinal, local anaesthetic will be injected through the spinal needle. Spinals have a rapid onset and surgery can proceed within 5-10 minutes. They are very effective and suitable to be used alone or with minimal sedation. As the spinal takes effect, you may experience a warm sensation in your legs or buttocks. This gives way to complete numbness and difficulty moving your legs. Your anaesthetist will test the spinal, usually with something cold, such as ice, and the surgery will not commence until they are confident that the spinal is working properly.

If you are having an epidural, the fine plastic tube (epidural catheter) will be inserted, and the needle removed. The epidural catheter allows further medications to be injected into the epidural space without the need for further needles. Epidurals take up to 30 minutes to have their maximum effect. Depending on the medications used, you may be made completely numb so that surgery can be performed safely and comfortably. If you are completely numb, it is common to also have paralysis, or not be able to move your legs. This is temporary and your leg strength will return as the medications wear off. The medications can be adjusted so that you have slight numbness and pain relief. This is often used to provide pain relief after surgery. During surgery, whether having a spinal or epidural, there will be a screen or drape in front of you so that you do not see the operation. Your anaesthetist will monitor you during the entire operation. If you are having sedation, they may be able to adjust how drowsy you feel.

Post Procedure

In the early postoperative period you may still have numbness and weakness from the spinal or epidural as the local anaesthetic used may take some hours to wear off. The numbed areas will be protected from pressure and injury until sensation returns. As normal sensation returns, you may experience some tingling in the skin. You may also become aware of some discomfort from the operation at this time and you should ask for more pain relief before the pain becomes more severe.

It is important that you ask for help before getting out of bed following a spinal or epidural as you may experience ongoing leg weakness. This will usually recover fully.

Risks to be aware of

Major complications with spinals and epidurals are uncommon when anaesthesia is administered by a specialist anaesthetist. Minor risks can include a drop in blood pressure, the requirement for a urinary catheter, shivering, itching, bruising, headache, nausea and vomiting. A spinal headache, whilst rare, can occur after the injection. It will usually resolve with rest however further treatment can be provided if required.

While extremely rare, serious side effects such as severe allergic reaction, temporary nerve damage, total spinal anaesthesia, bleeding or infection exist. Remember that the risks of these more serious complications, including death, are very rare.

Some complications may not show up for some time after the surgery. It is important to notify your anaesthetist if you have a severe, unrelievable headache, new, unexplained pain at the injection site, buttocks or legs, especially if associated with fever or chills, new numbness, decreased or altered sensation in legs, buttocks orabdomen, weakness in lower limbs or difficulty passing urine or bowel incontinence.

You are encouraged to ask your anaesthetist any questions you may have. They will be more than happy to answer them and discuss the best management plan approaching your procedure.

This pamphlet provides general information about epidural and spinal anaesthesia and analgesia. It is not a substitute for advice provided by your specialist about your personal treatment plan. Every effort is made to ensure that the information is accurate and up to date. However, we do not guarantee or warrant the accuracy or completeness of the information provided. This information may change with time due to advancements in clinical research and knowledge. Use this pamphlet only in consultation with your specialist. We prefer our members to link to our website rather than print or republish our materials on your own website to ensure you have access to the most up-to-date version. For the latest version please visit the ASA Website. Last reviewed 12/03/24.

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