



## **Informed Consent for Neuraxial Anaesthesia: Spinal and Epidural**

### **Spinal anaesthetic:**

A special spinal needle is inserted between the vertebrae of the lower back to enable the anaesthesiologist to administer local anaesthetic drugs into the spinal cord canal containing the spinal nerves and fluid (the subarachnoid space). The drugs mix with the spinal fluid and temporarily block the spinal nerves resulting in numbing and paralysis of the entire lower body called a spinal block.

A spinal block is a once off bolus injection, the onset is quick and if the spinal block is successful it is a complete block with absolute temporary loss of sensation and movement. The duration of paralysis and loss of sensation depends on the dosage and specific drugs used but is usually between 4-6 hours.

A spinal block is ideal for surgery on the lower half of the body, often used for painful hip or knee replacement surgery and caesarean sections.

### **Epidural anaesthetic:**

A special needle with a catheter is inserted between the vertebrae of the lower back until the tip reaches the epidural space, the catheter is then threaded and left in the epidural space while the needle is removed. The epidural space is basically the space through which the spinal nerves travel after they leave the fluid filled spinal canal. Local anaesthetic drugs are continuously infused into the epidural space where it slowly blocks the spinal nerves traversing it.

The result is a slow onset progressive block of the lower body. The quality of the epidural block is determined by the concentration and volume of local anaesthetic drugs infused. The infusion can be manipulated to maintain a loss of sensation without much muscle paralysis. This can be maintained over a prolonged period of time.

Epidural neuraxial blocks are not as often used as spinal blocks because of the slow onset of the block, the more technically difficult placement technique of the catheter and the higher risk for complications due to the bigger needle and indwelling catheter. In special circumstances, it can be used to manage labour pain during normal delivery.

Both spinal and epidural neuraxial blocks are performed in the awake state with the patient in a sitting position. The overlying skin is infiltrated with a fast acting local anaesthetic before the spinal/epidural needle is passed between the vertebrae.

During replacement surgery patients often receive additional light general anaesthesia or sedation after the spinal block for comfort during surgery.

For caesarean sections, you must ideally be fully awake throughout the surgery because sedative drugs will pass through the placenta to the baby.

Your anaesthesiologist will do the appropriate monitoring during the surgery in theatre.

It is very important not to try and stand or walk while the spinal or epidural anaesthetic is not fully worn off and to follow the nursing protocols in the ward until you have fully recovered.

### **Advantages of a spinal or epidural anaesthetic:**

- Excellent pain relief, less need for strong analgesic drugs with their associated side effects.
- Less nausea and vomiting with earlier return to eating and drinking.
- Less risk of blood clots in the leg veins post operatively. (DVT)
- Reduced blood loss during surgery.
- Less effect on the heart and lungs.
- Less confusion or disorientation in old people.
- Once off epidural steroid injections can be done to manage chronic back pain.

## **Contraindications:**

- Patients receiving blood thinning products, e.g. Warfarin, Plavix, Xarelto or Pradaxa.
- Patients with blood clotting disorders.
- Patients with allergies to local anaesthetic drugs.
- Patients with tight or leaking heart valves.
- Patients with chronic neurological conditions.
- Infection at the site of injection or systemic infection.
- Patients with previous spinal surgery is a relative contra-indication.

In spite of meticulous care and precautions measures all medical procedures have potential complications.

## **Complications:**

### **Common**

Dizziness, headache, nausea, vomiting and shivering.  
Fall in blood pressure.  
Difficulty in passing urine.  
Tenderness, swelling and bruising at injection site.  
Bleeding at the injection site.

### **Less Common**

Severe headache.  
Intense itching or rash.  
High block with difficulty in breathing.

### **Rare**

Infection at the injection site.  
Nerve damage.  
Drug overdose, convulsions and even heart arrest.  
Block works only partially or not at all.  
Deafness

### **Very Rare**

Permanent nerve damage with paralysis.  
Blood clot with spinal cord damage.  
High block with loss of consciousness.  
Breakage of needle.  
Meningitis and epidural abscess.  
Death

Neuraxial anaesthesia is available and commonly utilized to help with pain management or as sole primary anaesthesia. You are free to accept or decline it. Additional fees are charged for blocks and medical aid contributions differ and may not cover all costs. The lists of complications are not complete. You should ask questions and make an informed decision. Serious complications are rare. Brink Anaesthesiologists perform many successful spinal blocks, most without any complications.

**I confirm that I have read and understood the information provided above. I confirm that I understand the risks of possible complications inherent to spinal and epidural neuraxial anaesthesia. I have been given the opportunity to discuss my concerns with the anaesthesiologist. I declare that I am of sound mind and not under duress at the time of signing this consent. I hereby give permission to a spinal or epidural neuraxial anaesthetic block for myself/my dependent, knowing that incident free neuraxial anaesthesia cannot be guaranteed.**

Signed \_\_\_\_\_  
(Patient/parent or guardian)

Date \_\_\_\_\_