

## Day Surgery

# Patient information for Central Neuraxial Block

# Introduction

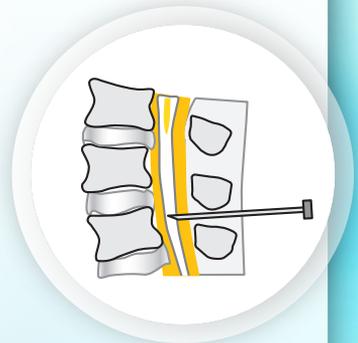
This leaflet aims to provide you with the basic information about the central neuraxial block that you are going to receive. If you have any questions about your anaesthesia that are not covered in this leaflet, please discuss with your anaesthetist who will be willing to answer your questions.

## What is central neuraxial block? .....

Central neuraxial block is a technique of anaesthesia where nerves from the spinal cord are anaesthetised. This can be done by the following methods:

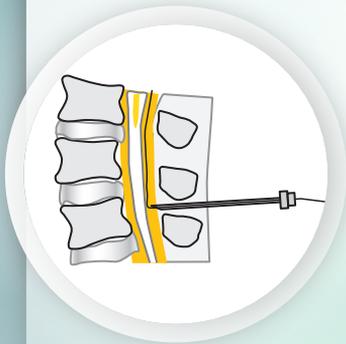
### Spinal anaesthesia:

A very thin needle is inserted between the bones of your spine into the spinal canal. A small amount of local anaesthetic drug is injected so that the nerves from the spinal cord are anaesthetised.



### Epidural anaesthesia:

A needle is inserted between the bones of your spine into the epidural space (outside the dura membrane but within the spinal canal), a fine plastic tubing is then passed through this needle and positioned in the epidural space. Local anaesthetic drug can be injected through the plastic tubing to anaesthetise the spinal nerves.



## **Combined spinal epidural anaesthesia:**

The spinal and epidural anaesthesia can be done together using a specially designed needle set.

### **What will you feel during your central neuraxial block? .....**

You will lose sensation over the lower part of your body. Thus you will not experience any pain although you may be aware of a vague sense of touch. However, this is not unpleasant. Also, you will lose power in your legs during the duration of the block. You will still be awake and know that the operation is taking place but will not be able to see the operation because a screen will be placed. If safe and appropriate, your anaesthetist will give you sedative drug to relieve your anxiety or you may request this. Your sensation and power will come back after the effect of the local anaesthetic drug wears off. It may require a few hours for full sensation and muscle power to restore and to allow walking.

## Are there any conditions that make you unsuitable for central neuraxial block? ..

- Your anaesthetist will determine whether you are suitable for central neuraxial block after assessing your medical condition and the nature of your operation. Some conditions may make you unsuitable for central neuraxial block:
- If you refuse
- If you have bleeding disorder: ease of bruising/prolonged bleeding
- If you receive anticoagulant or anti-platelet treatment: medications to “thin” your blood to prevent clotting
- If you have infection over your back around the proposed insertion site
- If you have operation of the back before, especially with the presence of implant
- If you have history of hypersensitivity to the local anaesthetic drugs

## Who is responsible for your central neuraxial block?.....

Your central neuraxial block will be provided by your anaesthetist. Anaesthetists are medical doctors who are trained and specialised in providing anaesthesia. Your anaesthetist/s will stay with you all the time during the anaesthesia and ensure your safety during your operation.

## Pre-anaesthetic assessment.....

- You will usually be seen by your anaesthetist before your operation. Your anaesthetist will do the following things in the assessment:
- Ask about your medical, surgical, anaesthetic, allergic and drug history
- Ask about your smoking or drinking habits
- Perform a physical examination
- Review your investigation results and order further investigations if needed
- Discuss the plan for your anaesthesia and explain the risks and benefits
- Suggest pre-anaesthetic preparations
- Obtain consent for anaesthesia from you



## Do you need to fast before operation? .....

Similar to patient receiving general anaesthesia, you should not eat for at least 6 hours before your operation: known as 'fasting'. Fasting usually starts from midnight if you are scheduled to have your operation the following morning, or from 7 a.m. if you are scheduled to have your operation in the afternoon of that day. The hospital will give you clear instructions about fasting and you should follow these. You can safely drink water until 2 hours before the operation.

## Your usual medications.....

Your anaesthetist will advise you on which usual medications you should or should not take on the day of your operation. You should follow these instructions. You are allowed to take your medications with a mouthful of water while you are fasting.

## What should you do if you feel unwell on the day of operation? .....

Please inform the hospital if you feel unwell on the day of your operation. Your operation may need to be postponed until you feel better in order to reduce unnecessary risks.



## On the day of operation .....

- In the theatre, your anaesthetist, surgeon and operation nursing staff will check your identity, the type of operation, the site of operation and the type of anaesthesia before the procedure. This is to ensure you are the right patient and your planned operation and anaesthesia are correct; we call this final verification process as 'time out'
- Various monitors will be attached to you
- Your anaesthetist will insert a catheter into your vein with a needle before performing central neuraxial block
- You may be asked to lie on your side or to sit up while your anaesthetist performs the block
- The block will be done under sterile technique
- After the block is done, your anaesthetist will assess the effect of anaesthesia before the operation starts. It may be necessary for you to have general anaesthesia if the effect of the central neuraxial block is not satisfactory
- The anaesthetist will stay with you at all times during the operation, monitor your vital signs, give you treatment as necessary and ensure your safety

## Post-operative Pain relief.....

After the block wears off in a few hours, you may start to have wound pain. In the recovery room, systemic analgesia will be administered to keep the pain score less than 4/10. When you are discharged to ward or back home, you are advised to take regular analgesia for the first few days postoperatively.

## Is there any risk in central neuraxial block?.....

In general, central neuraxial block is safe. The side effects and complications associated with this anaesthetic technique can be divided into those that are very common, common, rare or very rare\*.

\* Reference of occurrence rate

Very common	Common	Uncommon	Rare	Very rare
1 in 10	1 in 100	1 in 1000	1 in 10,000	1 in 100,000

### **Very common and common side effects**

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Self limiting headache

Self limiting back pain

Transient difficulty in passing urine

Itchiness associated with opioid

### **Rare or very rare complications**

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Spinal or epidural haematoma (blood clot)

Epidural abscess and infection

Nerve damage and paralysis

Local anaesthetic toxicity

Irregular heart rate

## After the operation .....

- It takes up to four hours for sensation (feeling) to fully return. You should tell the ward staff about any concerns or worries you may have
- As sensation returns, you will usually feel some tingling. You may also become aware of some pain from the operation and you can ask for any pain relief you need.
- You may be unsteady on your feet when the spinal anaesthesia wears off and may be a little lightheaded if your blood pressure is low.
- You can usually eat and drink much sooner after a spinal anaesthesia than after a general anaesthesia
- Sometimes sedation is given. This will affect your judgement, coordination and memory for 24 hours. In this time, you must not:
  - ✗ Look after dependents
  - ✗ Drive a car or ride a bicycle
  - ✗ Cook or operate machinery
  - ✗ Make any important decisions eg. sign a legal document
  - ✗ Take sleeping tablets
  - ✗ Drink alcohol



- A capable adult will need to take you home by car or taxi- ideally not public transport. As the effects of sedation can last up to 24 hours, they should stay overnight to look after you. If arrangements have not been made for someone to accompany you after treatment, you may not be able to go home after the procedure
- Sedation may make you unsteady on your feet. Please be careful on stairs and have somebody with you if you feel unsteady.
- You should take your usual medicines unless you are told not to by your doctor.

## **Pain Relief Guide at home-a guide on how to take your painkillers .....**

- It is natural to experience some pain following a surgical procedure.
- You may have been given more than one type of painkiller to take home with you. This is because each type of painkiller works in a different way to help relieve your pain.
- Prevention is better than cure, so remember to take your painkillers as directed and keep pain scores lower than 4

For more information refer to Day Surgery Pain Management Tip for more guidance.

# Remarks

This is general information only and the list of complications is not exhaustive. Other unforeseen complications may occasionally occur. In special patient groups, the actual risk may be different. For further information please contact your anaesthetist.

Complications may sometimes occur despite all precautions. However, if they do occur, your anaesthetist will take appropriate steps to manage them.

## *Reference*

*Coordinating Committee in Anaesthesiology (2020) Central Neuraxial Block (Spinal / Epidural Anaesthesia) for Adults v3.0;PILIC0154E*



**Patient Empowerment Programme, New Territories West Cluster**  
新界西醫院聯網 病人啟力基金

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