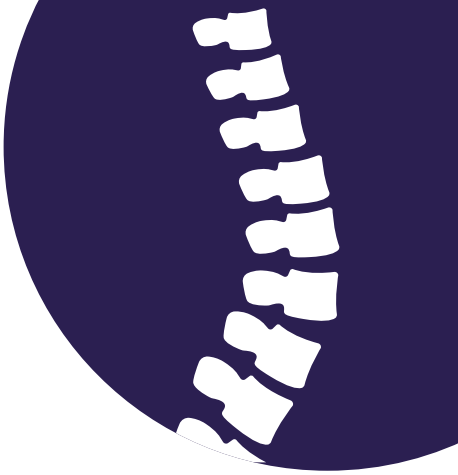
Royal College of Anaesthetists

Association of Anaesthetists

RA-UK Regional Anaesthesia United Kingdom



Your spinal anaesthetic

This leaflet explains what to expect when you have an operation with a spinal anaesthetic.

It has been written by anaesthetists, patients and patient representatives, working together.

Introduction

This leaflet explains:

- **what** a spinal anaesthetic is
- **how** it works
- **why** you could benefit from having one for your operation.

What is a 'spinal'?

For many operations it is usual for patients to have a general anaesthetic. However, for operations in the lower part of the body, sometimes it is often possible for you to have a spinal anaesthetic instead. This is when an anaesthetic is injected into your lower back (between the bones of your spine). This makes the lower part of the body numb so you do not feel the pain of the operation and can stay awake.

Typically, a spinal lasts one to two hours. Other drugs may be injected at the same time to help with pain relief for many hours after the anaesthetic has worn off.

During your spinal anaesthetic you may be:

- fully awake
- sedated – with drugs that make you relaxed, but not unconscious.

For some operations a spinal anaesthetic can also be given before a general anaesthetic to give additional pain relief afterwards.

Your anaesthetist can help you decide which of these would be best for you.

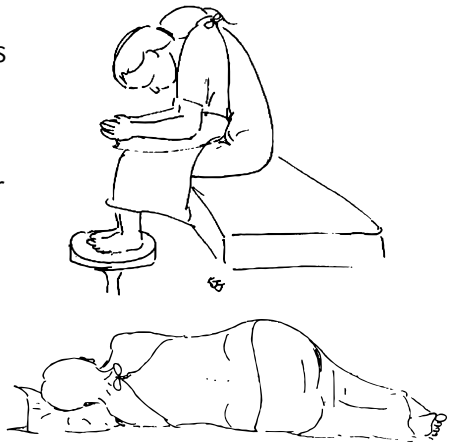
Your spinal anaesthetic

Many operations in the lower part of the body are suitable for a spinal anaesthetic with or without a general anaesthetic. Depending on your personal health, there may be benefits to you from having a spinal anaesthetic. Your anaesthetist is there to discuss this with you and to help you make a decision as to what suits you best.

A spinal anaesthetic can often be used on its own or with a general anaesthetic for:

- orthopaedic surgery on joints or bones of the leg
- groin hernia repair, varicose veins, haemorrhoid surgery (piles)
- vascular surgery: operations on the blood vessels in the leg
- gynaecology: prolapse repairs, hysteroscopy and some kinds of hysterectomy
- urology: prostate surgery, bladder operations, genital surgery.

How is the spinal performed?



- You may have your spinal in the anaesthetic room or in the operating theatre. You will meet the anaesthetic assistant who is part of the team that will look after you.
- Your anaesthetist will first use a needle to insert a thin plastic tube (a 'cannula') into a vein in your hand or arm. This allows your anaesthetist to give you fluids and any drugs you may need.
- You will be helped into the correct position for the spinal. You will either sit on the side of the bed with your feet on a low stool or you will lie on your side, curled up with your knees tucked up towards your chest.
- The anaesthetic team will explain what is happening, so that you are aware of what is taking place.
- A local anaesthetic is injected first to numb the skin and so make the spinal injection more comfortable. This will sting for a few seconds. The anaesthetist will give the spinal injection and you will need to keep still for this to be done. A nurse or healthcare assistant will usually support and reassure you during the injection.

You may also meet Anaesthesia Associates who are highly trained healthcare professionals. You can read more about their role and the anaesthesia team on our website: rcoa.ac.uk/patientinfo/anaesthesia-team

What will I feel?

A spinal injection is often no more painful than having a blood test or having a cannula inserted. It may take a few minutes to perform, but may take longer if you have had any problems with your back or have obesity.

- During the injection you may feel pins and needles or a sharp pain in one of your legs – if you do, try to remain still, and tell your anaesthetist.
- When the injection is finished, you will usually be asked to lie flat if you have been sitting up. The spinal usually begins to have an effect within a few minutes.

- To start with, your skin will feel warm, then numb to the touch and then gradually you will feel your legs becoming heavier and more difficult to move.
- When the injection is working fully, you will be unable to lift your legs up or feel any pain in the lower part of the body.

Testing if the spinal has worked

Your anaesthetist will use a range of simple tests to see if the anaesthetic is working properly, which may include:

- spraying a cold liquid and ask if you can feel it as cold
- brushing a swab or a probe on your skin and asking what you can feel
- asking you to lift your legs.

It is important to concentrate during these tests so that you and your anaesthetist can be reassured that the anaesthetic is working. The anaesthetist will only allow the surgery to begin when they are satisfied that the anaesthetic is working.

During the operation (spinal anaesthetic alone)

- In the operating theatre, a full team of staff will look after you. If you are awake, they will introduce themselves and try to put you at ease.
- You will be positioned for the operation. You should tell your anaesthetist if there is something that will make you more comfortable, such as an extra pillow or an armrest.
- You may be given oxygen to breathe, through a lightweight, clear plastic mask, to improve oxygen levels in your blood.
- You will be aware of the 'hustle and bustle' of the operating theatre, but you will be able to relax, with your anaesthetist looking after you.
- You may be able to listen to music during the operation. If you are allowed, bring your own music, with headphones. Some units supply headphones or play music in the operating theatre.
- You can talk with the anaesthetist and anaesthetic assistant during the operation.

If you have sedation during the operation, you will be relaxed and may be sleepy. You may snooze through the operation, or you may be awake during some or all of it. You may remember some, none or all of your time in theatre.

For more information about sedation, please see our '*Sedation explained*' leaflet, which can be found on our website: rcoa.ac.uk/patientinfo/sedation

You may still need a general anaesthetic if:

- your anaesthetist cannot perform the spinal
- the spinal does not work well enough around the area of the surgery
- the surgery is more complicated or takes longer than expected.

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 first wears off and may be a little lightheaded if your blood pressure is low. Please ask for help from the staff looking after you when you first get out of bed.
- You can usually eat and drink much sooner after a spinal anaesthetic than after a general anaesthetic.

Why have a spinal?

The advantages of spinal alone compared with having a general anaesthetic may be:

- a lower risk of a chest infection after surgery
- less effect on the lungs and the breathing
- good pain relief immediately after surgery
- less need for strong pain-relieving drugs that can have side effects
- less sickness and vomiting
- earlier return to drinking and eating after surgery.

Understanding risk

People vary in how they interpret words and numbers. This scale is provided to help.

Serious problems are uncommon with modern anaesthetics. New equipment and techniques, training standards and more effective drugs have made it a much safer procedure.

To understand the risk to you, you must know:

- how likely it is to happen
- how serious it could be
- how it can be treated.

The anaesthetist can discuss risks with you and help you make a decision on what type of anaesthetic is best for you.

Side effects and complications

As with all anaesthetic techniques, there is a possibility of unwanted side effects or complications with a spinal anaesthetic. More information about the side effects and complications from a spinal anaesthetic can be found on our website: rcoa.ac.uk/patientinfo/risks/risk-leaflets

Very common events and common side effects

- **Low blood pressure –** as the spinal takes effect, it can lower your blood pressure. This can make you feel faint or sick. This will be controlled by your anaesthetist with the fluids given through your drip and by giving you drugs to raise your blood pressure.
- **Itching –** this can commonly occur if morphine-like drugs have been used in the spinal anaesthetic. If you have severe itching, a drug can be given to help.
- **Difficulty passing urine (urinary retention) or loss of bladder control (incontinence) –** you may find it difficult to empty your bladder normally while the spinal is working or, more rarely, you may have loss of bladder control. Your bladder function will return to normal after the spinal wears off. You may need to have a catheter placed in your bladder temporarily, while the spinal wears off and for a short time afterwards. Your bowel function is not affected by the spinal.
- **Pain during the injection –** if you feel pain in places other than where the needle is – you should immediately tell your anaesthetist. This might be in your legs or bottom, and might be due to the needle touching a nerve. The needle will be repositioned.
- **Post-dural puncture headache –** there are many causes of headache after an operation, including being dehydrated, not eating and anxiety. Most headaches can be treated with simple pain relief. Uncommonly, after a spinal it is possible to develop a more severe, persistent headache called a post-dural puncture headache, for which there is specific treatment. This happens on average about 1 in 200 spinal injections. This headache is usually worse if you sit up and is better if you lie flat. The headache may be accompanied by loss of hearing or muffling or distortion of hearing.

For more information about post-dural puncture headaches, please read the leaflet *Headache after a spinal or epidural injection* which is available on our website: rcoa.ac.uk/patientinfo/risks/risk-leaflets

Rare complications

Nerve damage – this is a rare complication of spinal anaesthesia. Temporary loss of sensation, pins and needles and sometimes muscle weakness may last for a few days or even weeks, but most disappear with time and a full recovery is made.

Permanent nerve damage is rare (approximately 1 in 50,000 spinals). It has about the same chance of occurring as major complications of having a general anaesthetic.

For more information on nerve damage please read the leaflet *Nerve damage associated with a spinal: or epidural injection* which is available on our website: rcoa.ac.uk/patientinfo/risks/risk-leaflets

Frequently asked questions

Can I eat and drink before my spinal?

You will be asked to follow the same rules as if you were going to have a general anaesthetic. This is because it is occasionally necessary to change from a spinal to a general anaesthetic. The hospital should give you clear instructions about when to stop eating and drinking before your surgery.

Do I have to stay fully conscious?

Before the operation, you and your anaesthetist can decide together whether you remain fully awake during the operation or would prefer to be sedated so that you are not so aware of the whole process. The amount of sedation can usually be adjusted so that you are aware, but no longer anxious. It is also possible to combine a spinal with a general anaesthetic but this does mean there are risks of both a spinal and a general anaesthetic.

Will I see what is happening to me?

A screen is placed across your body at chest level, so that you can't see the surgery. Some operations use video cameras and telescopes for 'keyhole' surgery. Some hospitals give patients the option to see what is happening on the screen.

Do I have a choice of anaesthetic?

Yes usually, depending on the actual surgery and any potential problems with you having a spinal. Your anaesthetist will discuss choices with you.

There are uncommon reasons why you may not be able to have, or may be advised not to have, a spinal anaesthetic. These include having:

- certain abnormalities of your spine or previous surgery on your back
- 'blood thinning drugs' that cannot be stopped or abnormalities of your blood clotting
- infection in the skin of your back or a high temperature
- certain heart conditions.

Can I refuse to have the spinal?

Yes. If, following discussion with your anaesthetist, you decide you do not want one or are still unhappy about having a spinal anaesthetic, you can always say no.

Will I feel anything during the operation?

You should not feel pain during the operation but for some procedures you may be aware of pressure as the surgical team carry out their work.

Should I tell the anaesthetist anything during the operation?

Yes, your anaesthetist will want to know about any sensations or other feelings you experience during the operation; this is part of their monitoring of the anaesthetic.

Is a spinal the same as an epidural?

No. Although they both involve an injection of local anaesthetic between the bones of the spine, the injections work in a slightly different way. With an epidural a fine plastic tube remains in your back during the operation meaning that more anaesthetic can be used as necessary.

More details can be found in our leaflet *Epidural pain relief after surgery,* which is available from our website: rcoa.ac.uk/patientinfo/leaflets-video-resources

Where can I learn more about having a spinal?

You can speak to your anaesthetist or contact the pre-assessment clinic or anaesthetic department in your local hospital.

Tell us what you think

We welcome suggestions to improve this leaflet.

If you have any comments that you would like to make, please email them to: patientinformation@rcoa.ac.uk

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Fifth Edition, February 2020

This leaflet will be reviewed within three years of the date of publication.