

# 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.

## Contents

This leaflet explains:

- what a spinal anaesthetic is
- when it is used
- why you could benefit from having one for your operation
- how it works and what you can expect
- risk and shared decision-making.

## What is a 'spinal'?

For many operations, it is usual for patients to have a general anaesthetic. However, for operations below the waist, it may be possible for you to have a spinal anaesthetic instead. This is when a local anaesthetic is injected into your lower back (between the bones of your spine). This provides anaesthesia from the waist down so that you do not feel any discomfort during the operation. With a spinal anaesthetic you can stay awake during the procedure.

Typically, the effects of a spinal anaesthetic last for a few 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 or drowsy, but you will not be completely asleep and you may be aware of your surroundings.

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

Many operations on lower parts of the body are suitable for a spinal anaesthetic, especially those involving keyhole surgery.

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

- general surgery, for example, hernias, haemorrhoid surgery (piles) and operations on the bowel
- orthopaedic surgery on joints, such as hip and knee replacements, or bones of the leg

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- vascular surgery: operations on the blood vessels in the leg
- gynaecology: prolapse repairs, hysteroscopy and some types of hysterectomy
- urology: prostate surgery, bladder operations, genital surgery
- cancer surgery in the abdomen (tummy).

## Why have a spinal?

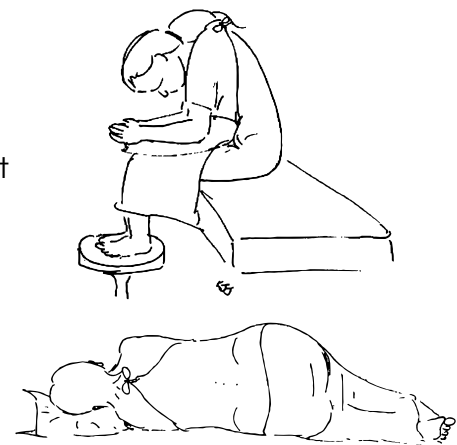
Depending on your personal health, there may be benefits to you from having a spinal anaesthetic. Your anaesthetist will discuss this with you and help you make a decision about what will be best for you.

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

- a lower risk of a chest infection after surgery
- a lower risk of developing blood clots in the legs
- less negative 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.

## 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.
- The anaesthetist or the assistant will connect monitors to measure your heart rate, blood pressure and oxygen levels and any other equipment as required.
- 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 edge 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.
- Local anaesthetic is injected first to numb the skin and make the spinal injection more comfortable. The anaesthetist will give the spinal injection; 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.
- Sometimes a urinary catheter (a flexible tube to drain urine from your bladder) may be required. If you need one, it will be inserted after the spinal has started working.



### What will I feel?

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

- During the injection you may feel pins and needles or unusual sensation 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 legs and tummy may feel warm, then numb to the touch. Gradually you will feel your legs becoming heavier and more difficult to move. This is perfectly normal and means that the anaesthetic is working.
- When the anaesthetic is working fully, you will not be able to lift your legs up and you will not feel any pain in the lower parts 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 asking if you can feel it on your legs and tummy
- gently touching your legs and tummy with a blunt-ended instrument
- 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.
- The anaesthetist and the anaesthetic assistant will be looking after your safety and wellbeing throughout the operation.
- 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. This will depend on whether or not you have been given sedation.
- 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.

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For more information about sedation, please see our **Sedation explained** leaflet, which can be found on our website: [rcoa.ac.uk/patientinfo/sedation-explained](https://rcoa.ac.uk/patientinfo/sedation-explained).

It is important to be aware that, even if a spinal is planned for your surgery, 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 that you may have.
- As sensation returns, you will usually feel some tingling. You may also become aware of some discomfort from the operation and you can ask for pain relief if needed.
- 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.

## The preoperative assessment clinic (preassessment)

If you are having a planned operation, you might be invited to a preoperative assessment clinic a few weeks or days before your surgery. Sometimes, for more minor surgery, a nurse will arrange a telephone call to go through some questions with you.

Please bring with you:

- a list of your current medications or your medicines in their full packaging
- any information you have about tests and treatments at other hospitals
- information about any problems you or your family may have had with anaesthetics
- any recent blood pressure measurements.

If you take any drugs to thin your blood, it is important that the preassessment team know and discuss whether you need to stop taking these drugs before your surgery

You may meet with an anaesthetist at the clinic. Otherwise, you will meet your anaesthetist in the hospital on the day of your surgery.

### Risk and anaesthesia

Modern anaesthetics are very safe. There are some common side effects from the anaesthetic drugs or the equipment used, which are usually not serious or long lasting. Risks will vary between individuals and will depend on the procedure and anaesthetic technique used.

Your anaesthetist will discuss with you the risks that they believe to be more significant for you. They will only discuss less common risks if they are relevant to you.

There are some specific risks associated with a spinal anaesthetic, for example, a severe headache (see our leaflet on **Headache after a spinal or epidural injection**: <https://bit.ly/RCoA-Headache>) and nerve damage (see our leaflet on **Nerve damage after a spinal or epidural anaesthetic**: [rcoa.ac.uk/patientinfo/nd-after-spinal-epidural](https://rcoa.ac.uk/patientinfo/nd-after-spinal-epidural)).

If you wish to read more detail about risks and side effects associated with spinals, please visit Spinal anaesthetics – risks and side effects ([rcoa.ac.uk/patientinfo/spinal](https://rcoa.ac.uk/patientinfo/spinal)).

### Shared decision-making

Shared decision-making ensures that individuals are supported to make decisions that are right for them. It is a collaborative process through which a clinician supports a patient to reach a decision about their treatment.

The conversation brings together:

- the clinician's expertise, such as treatment options, evidence, risks and benefits
- what the patient knows best: their preferences, personal circumstances, goals, values and beliefs.

Find out more on the National Institute for Health and Care Excellence website:

<https://bit.ly/NICE-SDMinfo>.

Here are some tools that you can use to make the most of your discussions with your anaesthetist or preoperative assessment staff:

What are the	<b>Benefits?</b>
What are the	<b>Risks?</b>
What are the	<b>Alternatives?</b>
What if I do	<b>Nothing?</b>

#### Choosing Wisely UK BRAN framework

Use this as a reminder to ask questions about treatment.

[https://bit.ly/CWUK\\_leaflet](https://bit.ly/CWUK_leaflet)

**NHS**



#### NHS ask three questions

There may be choices to make about your healthcare.

[https://bit.ly/NHS\\_A3Qs](https://bit.ly/NHS_A3Qs)

#### The Centre for Perioperative Care (CPOC)

CPOC has produced an animation to explain shared decision-making.

[cpoc.org.uk/shared-decision-making](https://cpoc.org.uk/shared-decision-making)

# Questions

## you might like to ask

If you have questions about your anaesthetic, write them down (you can use the examples below and add your own in the space below). If you want to speak to an anaesthetist before the day of your operation, contact the preoperative assessment team who may be able to arrange for you to speak to an anaesthetist on the telephone or see them in a clinic.

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**1** What are the advantages and disadvantages of a spinal anaesthetic for me?

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**2** Are there any alternative options to a spinal?

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**3** ...

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**4** ...

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**5** ...

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### Disclaimer

We try very hard to keep the information in this leaflet accurate and up-to-date, but we cannot guarantee this. We don't expect this general information to cover all the questions you might have or to deal with everything that might be important to you. You should discuss your choices and any worries you have with your medical team, using this leaflet as a guide. This leaflet on its own should not be treated as advice. It cannot be used for any commercial or business purpose. For full details, please see our website:

[rcoa.ac.uk/patientinfo/resources#disclaimer](https://rcoa.ac.uk/patientinfo/resources#disclaimer)

### Information for healthcare professionals on printing this leaflet

Please consider the visual impairments of patients when printing or photocopying this leaflet. Photocopies of photocopies are discouraged because these tend to be low-quality prints and can be very difficult for patients to read. Please also make sure that you use the latest version of this leaflet, which is available on the RCoA website.

### Tell us what you think

We welcome suggestions to improve this leaflet. If you're a patient or carer, we'd love to hear from you. Please complete this short survey at: [rcoa.ac.uk/patientinfo/your-spinal-anaesthetic#tell-us](https://rcoa.ac.uk/patientinfo/your-spinal-anaesthetic#tell-us) or you can scan the QR code below with your mobile.

If you have any general comments, please email them to: [patientinformation@rcoa.ac.uk](mailto:patientinformation@rcoa.ac.uk).

Your feedback helps us understand who is using our information, how useful it is and how our resources have helped you. Thank you.



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

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