

Peripheral nerve blocks

This leaflet explains what to expect when you have a nerve block for an operation. It has been written by anaesthetists, patients and patient representatives, working together.

Contents

This leaflet explains:

- what a nerve block is
- why you could benefit from having one for your operation
- how it works
- what happens after
- risks and shared decision-making.

About nerve blocks

Nerve blocks are anaesthetic injections given to numb the nerves which supply a certain part of the body, for example, an arm, a hand, or a leg or foot. The local anaesthetic injection blocks the pain signals and makes the body part numb and immobile, although you may still feel movement and pulling during the procedure.

Nerve blocks can be used instead of a general anaesthetic in some circumstances. This can be particularly useful for patients who have medical conditions which put them at a higher risk from a general anaesthetic. Another advantage of having surgery under a nerve block is that it carries a lower risk of some of the complications associated with a general anaesthetic.

A nerve block can also be combined with a general anaesthetic to help manage pain after surgery. It can provide pain relief for up to 24 hours after surgery, although some areas may feel numb for up to 48 hours.

Sedation is often used with a nerve block to make you relaxed and sleepy during the operation. Sedation may be light or deep and you may remember everything, something or nothing after sedation. You can read more about sedation in our leaflet **Sedation explained** which can be found on our website here: rcoa.ac.uk/patientinfo/sedation-explained.

Your anaesthetist can help you decide which of these options would be best for you and your operation.

Benefits of peripheral nerve blocks

- Better pain relief after surgery.
- Less need for pain killers containing opioids in the period immediately after the surgery. These can make you feel sick and may cause constipation. More rarely there is a risk of addiction if you take them for a long time.

Peripheral nerve blocks

- Avoiding a general anaesthetic, including its risks and side effects. The common side effects of a general anaesthetic include sickness, sore throat and drowsiness.
- Being able to get up and move around earlier and leaving hospital sooner.

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 (or have available for the phone call):

- a list of your current medications, or bring your medicines in their full packaging
- if you take any drugs to thin your blood, it is important that the preassessment team know about this so they can discuss whether you need to stop taking these drugs before your surgery
- any information you have about tests and treatments you've had at other hospitals
- information about any problems you or your family may have had with anaesthetics
- any recent blood pressure measurements.

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

On the day of the operation

The hospital should give you clear instructions about eating and drinking and taking your medication. It's important to follow these instructions.

Starting the nerve block

You will usually be taken to a room near the operating theatre or the anaesthetic room to have the nerve block. Monitoring equipment will be connected so that the team can monitor your condition throughout the procedure.

The skin around the injection site will be cleaned and a small injection of local anaesthetic will be used to numb your skin – it does sting a little as it goes into the tissues.

After the skin is numb, a different needle is used to perform the nerve block. The anaesthetist will also use an ultrasound machine to see where the nerves are and inject the anaesthetic in the right place.

Most people find that the injections are no more painful than having a cannula put in (a thin plastic tube inserted into a blood vessel).

Your body part will start to feel warm and tingly before finally feeling heavy and numb. The injection typically takes between 20 and 40 minutes to work. The anaesthetist will check the sensations you can feel at different places. You will not be taken to theatre until the anaesthetist is happy that the block is working well.

Peripheral nerve blocks

If the block does not work fully, you will be offered more local anaesthetic, additional pain relief, or a general anaesthetic.

During the operation

A screen will be positioned in such a way that you cannot see the surgery being done.

You may be able to listen to your own music on your own device with headphones during the surgery – you should ask if this is possible.

An operating theatre is a busy place – there will typically be between five and eight people in theatre, each with their own role in helping look after you. A member of your anaesthetic team will be with you throughout the surgery, and sometimes other members of the team may also speak with you and help with your care.

If you are having sedation, you will be relaxed and sleepy. You will be given oxygen through a light plastic facemask. You may have memories of being in the operating theatre, although these may be patchy.

For more information about sedation, please see our **Sedation explained** leaflet which is available on our website: roa.ac.uk/patientinfo/sedation-explained.

After the operation

The effect of the nerve block can last for up to 48 hours. During this time the body part which has been anaesthetised will feel very heavy and will need to be supported until your muscles start working again. You may need someone to help you carry out everyday tasks as you recover from the surgery.

As the nerve block wears off you may experience pins and needles in your fingers or toes. This is completely normal.

Aftercare at home

Before being discharged you will be given information to help your recovery at home. You should use any supports you are given once back at home. This is because you will not have full sensation in the area of the surgery, and it can be easier to get injured. This numbness may commonly last up to 48 hours.

- Take special care around heat sources, such as fires or radiators. You will not feel heat while the body part is numb, and you may burn yourself.
- Avoid using any machinery or domestic appliances, such as kettles, irons and cooking equipment.
- Start taking your pain relief medicines before the block wears off and as instructed by the hospital. This is important as the effect of the nerve block can stop quite suddenly.

When to ask for help

You will need to seek help from the emergency medical services if:

- you notice unexplained breathlessness
- you experience severe pain that is not controlled by pain killers.

If the block has not fully worn off two days after the operation, you should contact the anaesthetic department by calling the number given on your discharge paperwork.

Further information about nerve blocks

RA-UK, the specialist society for regional anaesthesia, has produced an information video for patients on nerve blocks: **Nerve blocks: an information video for patients:** ra-uk.org/index.php/patient-info-video.

Risk and shared decision-making

Modern anaesthetics, including nerve blocks, are very safe. However, there are some common side effects associated with nerve blocks, which are usually not serious or long lasting. More rarely nerve blocks can cause damage to the nerves.

More information on these risks can be found in our risk leaflet **Nerve damage associated with peripheral nerve block** which is available from our website: coa.ac.uk/patientinfo/risk-leaflets.

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.

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 at: england.nhs.uk/personalisedcare/shared-decision-making.

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	Benefits?
What are the	Risks?
What are the	Alternatives?
What if I do	Nothing?

Choosing Wisely UK BRAN framework

Use this as a reminder to ask questions about treatment.

https://bit.ly/CWUK_leaflet



NHS ask three questions

There may be choices to make about your healthcare.

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

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 phone or to see them in a clinic.

- 1 Do I have any particular risks from having this kind of anaesthetic?
- 2 Do I have any increased risk from a general anaesthetic?
- 3 What happens if the block does not work?
- 4 ...
- 5 ...
- 6 ...

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

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: rcoa.ac.uk/patientinfo/leaflets-video-resources

Tell us what you think

We welcome suggestions to improve this leaflet. Please complete this short survey: surveymonkey.co.uk/r/testmain or scan the QR code with your mobile.



If you have any general comments, please email them to: patientinformation@rcoa.ac.uk.

Royal College of Anaesthetists

Churchill House, 35 Red Lion Square, London WC1R 4SG
020 7092 1500

rcoa.ac.uk



Sixth Edition, June 2023

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

© 2023 Royal College of Anaesthetists

This leaflet may be copied for the purpose of producing patient information materials. Please quote this original source. If you wish to use part of this leaflet in another publication, suitable acknowledgement must be given and the logos, branding, images and icons removed. For more information, please contact us.

