

# Regional anaesthesia – *peripheral nerve blocks* *for upper limb surgery*



Anaesthetic stops you from feeling pain and other sensations. It can be given in various ways and does not always make you unconscious. For upper limb surgery you can have a type of anaesthetic called a 'peripheral nerve block' or 'regional anaesthesia'.

Regional anaesthesia involves an injection of local anaesthetic around nerves to numb part (or all) of your arm. This is done by your anaesthetist, often using an ultrasound machine to accurately guide the injection of local anaesthetic to the right area of nerves. Once the anaesthetic has been given it usually takes 10-20 minutes to work.

Your operation will only go ahead when you and your anaesthetist are sure that the area to be operated on is completely numb. A screen shields the operating site, so you will not see the operation. Your anaesthetist will always be near to you and you can speak to them whenever you want to.

## Advantages of having a nerve block/regional anaesthetic

### **With a regional anaesthetic you can choose whether to:**

- stay awake
- listen to music
- use our audio-visual/tablet device (more information about this can be found in our separate leaflet)
- be given sedation. Sedation is the use of small amounts of anaesthetic or similar drugs to make you feel drowsy. It is not a general anaesthetic which would make you go completely to sleep.

### **Having regional anaesthetic means:**

- You will have good pain relief with less need for strong painkillers after the operation.
- You have a lower chance of feeling sick or vomiting after the operation.
- You are likely to recover more quickly after the operation.

All of these benefits mean that you may be able to leave hospital earlier than if you had been given a general anaesthetic.

If you do not want to have a nerve block you have the right to refuse this option. Your surgeon and the anaesthetist will then discuss other options for the surgery with you.

## Side effects and complications

### Understanding risk

People vary in how they interpret words and numbers. This scale is provided to help you understand how likely the side effects and risks are of this type of anaesthesia, compared with a general anaesthetic.

### Very common and common side effects

(1 in 10 to 1 in 100 people)

(Key: GA = General Anaesthetic, RA = Regional Anaesthetic)

#### GA RA

- √            Feeling sick and vomiting
- √            Sore throat
- √    √       Dizziness, blurred vision
- √            Headache
- √            Itching
- √    √       Aches, pains, and backache
- √    √       Bruising and soreness from the injection
- √            Confusion, memory loss
- √       Conversion to GA (if the block doesn't work)

### Uncommon side effects and complications

(1 in 1000 people)

#### GA RA

- √            Chest infection
- √            Muscle pains
- √    √       Breathing problems (during or after the operation)
- √            Damage to teeth, lips and tongue from equipment used during GA
- √    √       An existing medical condition getting worse
- √            Awareness (becoming conscious during your operation)

## Rare or very rare complications

(1 in 10,000 to 1 in 100,000 people)

### GA RA

✓		Damage to eyes
✓	✓	Serious allergy
✓	✓	Nerve damage
✓	✓	Equipment failure
✓	✓	Death

Although this is a safe procedure there are still risks:

- incomplete block (occasionally an extra injection is needed to completely numb the area)
- bruising or bleeding at the injection site
- numbness/tingling lasting a few days
- infection
- nerve damage.

Deaths caused by anaesthesia are very rare, and are usually caused by a combination of four or five complications together. There are probably about five deaths for every million anaesthetics given in the UK.

Questions you might like to ask your anaesthetist when you come in for the operation:

- Q Who will give me the anaesthetic?
- Q What are the risks of this type of anaesthetic?
- Q Do I have any specific risks?
- Q How will I feel afterwards?

For more information the following links may be useful:

Risks of anaesthesia:

<http://www.rcoa.ac.uk/patients-and-relatives/risks>

Risks of nerve blocks:

<http://www.rcoa.ac.uk/system/files/PI-RISK-SERIES-2013.pdf>

## What happens on the day of the operation?

In the anaesthetic room, the anaesthetic assistant will ask you further questions and confirm the side of your body and area of your arm that will be operated on. They will connect you to monitoring equipment and your anaesthetist will place a cannula (thin tube) in your other hand. This is used to give you fluid and medication during the operation.

Your anaesthetist will ask you to keep quite still so they can give you your nerve block. When the needle is inserted, your anaesthetist will ask if you feel any tingling, or “twinge”, or an electric shock sensation.

It can take more than one attempt to get the anaesthetic needle in the correct place so that the area is properly numbed. If you find this too uncomfortable, please tell your anaesthetist.

You may notice a warm tingling feeling as the anaesthetic begins to take effect. It is common to feel as though the part of your body that is anaesthetised does not belong to you. You won't be able to move your arm when it is anaesthetised.

Once the nerve block is working, your anaesthetist will continue with the plan you have agreed for your time in surgery.

Your monitoring equipment will be temporarily disconnected and you will be wheeled on your trolley into the operating theatre.

In theatre, staff will be busy getting ready for your surgery and there may be lots of noise. You will be moved across from your trolley onto the operating table. The monitoring equipment will be reconnected; beeping will start as we measure your pulse and a blood pressure cuff will be inflated regularly.

## What happens after the operation?

Following the operation you may return from the operating theatre with a sling or temporary splint. This sling or splint is often used to help keep you comfortable after the operation.

It will take some hours for feeling to return to your arm. This can be from 1 to 36 hours, depending on the type of anaesthetic injection that is used for your nerve block. Your anaesthetist may be able to give you an idea of how long this should take.

While you are in the recovery area or ward, the staff will make sure your arm is protected from injury.

You can expect to feel tingling as feeling returns but this soon passes. At this point it is important to let staff know if you are feeling any pain.

If you are returning home on the same day as your operation, after leaving the hospital it is extremely important that you take regular painkillers at the prescribed times you have been given, from the moment of discharge. This is to avoid pain developing when the nerve block begins to wear off (which can be in the middle of the night). The tablets you are given can be taken together at the specified doses.

## When you get home

Your arm might still be numb when you return home from hospital.

You should carry your 'numb' arm in an arm sling until normal sensation and movements return. You will be given a sling at the end of the operation.

Your arm should be protected from heat or pressure. Avoid using your arm for difficult or heavy tasks.

You should take care to not come in contact with hot or cold items or surfaces because you will not be able to feel the temperature and protect yourself from scalds or burns.

## How to contact us

If you have any questions or concerns either before or after operation please contact the Nuffield Department of Anaesthetics at the John Radcliffe Hospital.

Tel: **01865 221 590** (answerphone service available)

Fax: 01865 220 027

If you have a specific requirement, need an interpreter, a document in Easy Read, another language, large print, Braille or audio version, please call **01865 221 473** or email **[PALSJR@ouh.nhs.uk](mailto:PALSJR@ouh.nhs.uk)**

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