



**SURGERY**

# Types of Anaesthetic

*There are various ways of giving you an anaesthetic for your operation.*

They allow you to have your surgery comfortably with the minimum risk of complications and the best possible post-operative pain control. In each case the most appropriate anaesthetic for you will be discussed with you by your surgeon and your anaesthetist.

This page gives you a brief idea of the three main types of anaesthetic that are used in our practice. Sometimes more than one type of anaesthetic is used at once.

Risks are always present with any procedure. As a guide:

Complication Rate	common	uncommon	rare	very rare
How many patients are affected	1 in 100	1 in 1000	1 in 10,000	1 in 100,000

## 1. Local Anaesthetic

This involves an injection very close to where the operation is to be performed. You usually remain wide awake during the operation. The injection is uncomfortable when it is performed but numbness follows rapidly. The area may remain numb for several hours after the operation.

This type of anaesthetic has the fewest risks associated with it. The risks include:

- Infection (uncommon)
- Bruising or bleeding (common)
- Damage to the nerves leaving a permanent patch of numbness (rare)

- Feeling faint or sick (common)
- Severe allergic reaction (very rare)

Sometimes the local anaesthetic is combined with adrenaline to stop bleeding during surgery. This helps because you might not then need a tourniquet on your arm which is uncomfortable. This adds some extra risks:

- A temporary 'rush' which is described as feeling like having too many cups of coffee (common)
- Damage to blood supply to finger tips (very rare). Modern studies, using low dose adrenaline, have shown this complication to be almost unheard of. Despite that your surgeon will avoid using adrenaline if the blood supply to your finger is less than perfect to start with.

## 2. Regional Anaesthetic (or regional nerve block)

### What is a nerve block?

A nerve block means numbing the big nerves high up your arm that supply feeling and power lower down towards your hand. The arm will be numb enough to have surgery. The block will also numb the area on the upper arm where we put a tourniquet to cut off the blood supply while we do the operation.

The block will last a few hours, then it will start to wear off and normal feeling and strength will return.

### How is the block done?

In the anaesthetic room, next to theatre, the anaesthetist will place a cannula (small plastic tube) in your hand and attach monitoring for your heart and lungs.

The nerves to your arm run from your neck behind your collarbone and through your armpit. The anaesthetist can find them in one of these places either by ultrasound (a painless scan as used on pregnant women to see the baby) or with a nerve stimulator. The nerve stimulator will cause twitching of the muscles in your arm. You can have light sedation, to relax you, for this if you wish.

The nerves are blocked by injecting local anaesthetic around them. Soon the arm will feel warm and tingly. After about 30 minutes, the arm will be quite numb and heavy.

During surgery, the anaesthetist, or their assistant will be with you all the time.

After surgery the arm will continue to be numb for about 8 hours, but this can last between 4 and 24 hours. The block will wear off gradually and normal strength and feeling will return.

*Cont...*



### *What are the benefits?*

By numbing the arm you may avoid a general anaesthetic.

This is good for you because:

- you avoid side-effects such as nausea and vomiting or confusion
- you avoid the need for strong painkillers which may make you drowsy
- it reduces stress on your heart and lungs
- you may eat and drink earlier

### *What are the risks?*

Your anaesthetist will be experienced in placing nerve blocks and most patients won't have any, or only temporary complications.

The risks include:

- nerve damage: about 1 in 5 patients report some numbness or tingling for up to 5 days, but permanent damage is rare. Nerve damage is also possible from your original injury or the surgery.
- bleeding: some bruising around the injection site is common, but bleeding caused by puncturing a larger blood vessel is rare.
- infection: precautions against infection are taken. Uncommon.
- inadequate block: if you are uncomfortable during the operation, the surgeon can add local anaesthetic, you can have painkillers injected or you may need a general anaesthetic. There will be someone with you throughout so you can let them know straight away if you are not comfortable.

### *What happens afterwards?*

You may either stay in hospital or go home the same day.

Whilst your arm is numb it will be protected by bandages and a sling. You should still take care that the arm is not injured, for example by pressure or heat, which you will not be able to feel.

You can start to eat and drink an hour after surgery.

You should start to take painkillers an hour or two after the operation to be sure that they are already working when the block starts to wear off. Your painkillers will be reviewed before you are discharged.

You should take painkillers regularly for 48 hours. After that take them as required.

### *Frequently Asked Questions about Regional Blocks*

#### *Can I eat and drink before a nerve block?*

No. You will still need to follow the fasting guidelines you were given by the hospital. This is in case you need to have a general anaesthetic after all.

#### *Must I stay fully conscious?*

No. Your anaesthetist will discuss with you the choices of being awake, being sedated and being anaesthetised. It is quite common to combine a nerve block with sedation or a light anaesthetic.

#### *Will I see or hear anything?*

If you are sedated or anaesthetised, you will not see or hear anything. If you are awake, there will be a screen between you and the operation, so you won't have to watch. On the other hand your surgeon will often be happy to show you what is happening if you are interested. You are welcome to bring your own music to listen to through headphones. You will be able to keep your hearing aids in and your spectacles on.

### *More Information on Regional Blocks*

You will find more information about nerve blocks on these websites:

[www.rcoa.ac.uk](http://www.rcoa.ac.uk) - "For Patients"

[www.nice.org.uk](http://www.nice.org.uk) - IPG285 "Ultrasound-guided regional nerve block"

## 3. General Anaesthetic

This is the familiar way of having surgery by 'going to sleep'. You are completely unconscious while you have the surgery.

There are different risks associated with this sort of anaesthesia which your anaesthetist will be best placed to discuss with you.