

## Important Notice

### Morning Surgery:

- Do not eat any food after midnight
- After midnight the only fluid which should be drunk is water until 6:00am

### Afternoon surgery:

- Do not eat any food after 7:30am
- After this the only fluid which should be drunk is water until 11:00am

### How can I help reduce healthcare associated infections?

Infection control is important to the well-being of our patients and for that reason we have infection control procedures in place. Keeping your hands clean is an effective way of preventing the spread of infections. We ask that you, and anyone visiting you, use the hand sanitiser available at the entrance to every ward before coming in to or after leaving the ward. In some situations hands may need to be washed at the sink using soap and water rather than using the hand sanitiser. Staff will let you know if this is the case.

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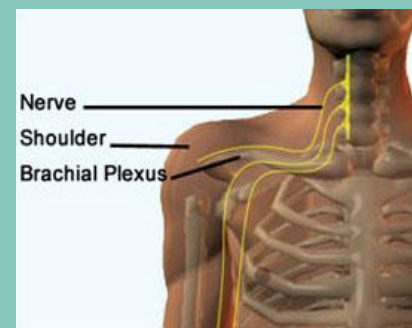
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## Brachial Plexus Block



### Patient information leaflet

If you require a translation or an alternative format of this leaflet please call the Patient Advice and Liaison Service on 01296 316042

Safe & compassionate care,

every time

## What is the Brachial Plexus?

This is the name given to the bundle of nerves that supply your shoulder, arm, and hand with feeling and power. These nerves start in your neck and travel via the armpit, eventually reaching the hand.

## What is a Brachial Plexus Block?

This can be used for surgery to the shoulder, arm, or hand. The feeling and movement of these areas can be prevented by placing an injection of local anaesthetic near to the nerves of the brachial plexus. The injection may be placed in the side of your neck, above or below your collar bone, or in your armpit depending upon the exact operation you are having.

Your anaesthetist will discuss the risks and benefits of the procedure with you. Together you can decide whether a brachial plexus block is best for you.

## The benefits of a Brachial Plexus Block

### 1. To avoid risks of a general anaesthetic

It may be possible to have your operation performed with a brachial plexus block alone. This may be important if you have heart or breathing problems. You will be awake and pain free during surgery, although you may still be able to feel pressure and movement in the area.

### 2. For pain relief after your operation

The block can be given as well as a general anaesthetic. It provides pain relief after your operation, which reduces the need for strong pain killers after surgery. It can also aid physiotherapy to start moving your arm or hand to help recovery.

## Other causes of nerve damage

There are other types of nerve damage that are not caused by the brachial plexus block. These include:

Damage caused by the surgery

Pressure on the nerves whilst you are anaesthetised due to awkward positioning

Use of a tourniquet on your arm during surgery which compresses the nerves and occasionally damages them.

Swelling of the area after your operation

Other medical problems eg: diabetes.

## More information

If you have any questions please ask your anaesthetist, surgeon, or nurses on the ward.

## Other sources of information

1. "Nerve damage associated with peripheral nerve blockade" (see [www.rcoa.ac.uk](http://www.rcoa.ac.uk))
2. "Risks associated with your anaesthetic" (see [www.rcoa.ac.uk](http://www.rcoa.ac.uk))
3. ASRA Practice Advisory on Neurologic Complications in Regional Anaesthesia and Pain Medicine  
[http://www.asra.com/publications/Article\\_of\\_the\\_month-Sept\\_2008.pdf](http://www.asra.com/publications/Article_of_the_month-Sept_2008.pdf)

## 2. Risk to nearby structures

If the injection is placed in the side of your neck, side effects including a hoarse voice, droopy eyelid, and feeling faint may occur. Sometimes you may find taking a deep breath difficult, or breathing more of an effort than normal. All these are temporary and will wear off when the block wears off.

If the injection is placed around the collarbone, there is a small (1 in 1000) risk of damage to the lung. This can usually be managed to keep you safe and permanent harm is very rare. Your anaesthetist can tell you more about this.

For all injections, there is a small risk of bleeding due to damage to a blood vessel. This can be treated by direct compression or extra fluids given into a vein. Please tell your anaesthetist if you take any blood thinning medications.

## 3. Nerve Damage

Nerve damage can occur because of direct injection into the nerve, bleeding or infection. The risk of permanent nerve damage is rare. It is the same for all injection sites. The best studies we have suggest nerve damage occurs in 1 in 15,000-30,000 patients. This is compared to the risk of dying on the UK's roads, which is also 1 in 15,000 people every year. Patients commonly notice areas of tingling and/or numbness in the arm, shoulder or hand. This occurs in around 1 in 20 patients and usually resolves within 3 weeks, occasionally up to 3 months.

## 3. To increase blood flow to the area

A brachial plexus block increases blood flow to the area affected. In certain situations, this may improve healing and speed up your recovery.

## What do I have to do before the operation?

As for a general anaesthetic, you will be asked to have no food for 6 hours and nothing to drink for 2 hours, prior to your operation. This is important if you are having a general anaesthetic as well, or if one is unexpectedly needed. You will have a consultation with your Anaesthetist prior to the operation where you will be assessed for the procedure and will have an opportunity to ask questions.



## How is a brachial plexus block performed?

When you arrive in theatre, your anaesthetist will attach equipment to you which monitors your heart rate, blood pressure and oxygen levels. He or she will also use a needle to place a cannula (a thin plastic tube) into a vein in your other hand or arm.

The block can be performed with you awake, sedated or anaesthetised.

Firstly the site of injection is cleaned, and an injection of local anaesthetic is used to numb the skin. Then a needle is used to inject local anaesthetic around the nerves. Initially your arm will feel warm and tingly. Within 40 minutes, it will become numb and heavy.

Your anaesthetist may use an ultrasound machine, or a small electric current to place the needle correctly. The electric current will make your arm twitch, which is a strange feeling but should not be painful.

Occasionally your anaesthetist may suggest placing a catheter (very thin plastic tube) through the needle at the same time, and this will remain in place next to the nerves after the needle has been removed. This will allow more local anaesthetic to be given later, up to a few days after your operation.

## Recovery

The effects of the local anaesthetic will last between 4 and 24 hours, on average 10–12 hours. Your arm will be held in a sling until strength has returned. Please ensure that feeling and strength has returned fully before using the arm.

## Are there any risks to a brachial plexus block?

These procedures are routine and are performed with maximum regard for your safety. However all medical treatments carry a risk. Your anaesthetist may suggest performing this block to spare you the risk of a general anaesthetic.

Brachial plexus blocks are not always completely effective. Sometimes the local anaesthetic does not spread to all the nerves. The operation you are having and your general body shape also affects the success rate. Your anaesthetist will be able to tell you how likely the block is to work fully. If the block does not work sufficiently for your operation, your anaesthetist will use another form of anaesthetic and pain relief before and after the surgery.

### 1. Risk due to local anaesthetic

Allergy to local anaesthetics can happen. It is very rare, and less likely than allergies caused by general anaesthetics. Overdose of anaesthetic should not happen because your weight is taken into account when calculating how much local anaesthetic you need.

Serious problems including fits, heart or breathing problems can happen, but they are rare. Your anaesthetist is trained to deal with these emergencies.