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# Patient Information

[Awake shoulder/hand surgery]

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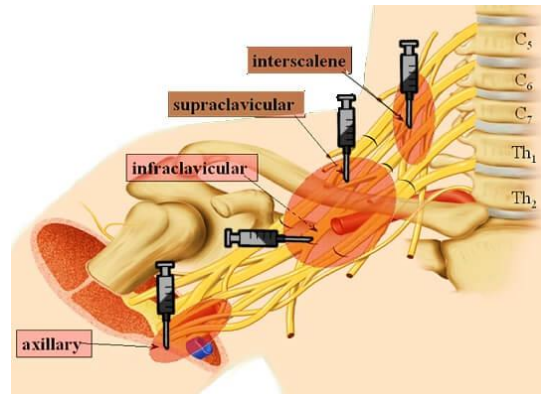
## Understanding Nerve Blocks (Brachial Plexus Blocks) for Shoulder and Hand Surgery

The brachial plexus is a network of nerves located between your neck and armpit, responsible for controlling movement and sensation in your arm, from the shoulder to the fingertips.

A brachial plexus block involves injecting local anaesthetic near your neck, collarbone, or armpit to interrupt the signals (including pain signals) traveling through these nerves. This results in your arm becoming numb, heavy, and immobile, preventing pain, though you may still feel some movement, pushing, or pulling as your arm is positioned.

This type of nerve block can offer pain relief for up to 24 hours following surgery, although some areas may experience reduced or altered sensation for up to 48 hours. As the block begins to wear off, you may notice a tingling sensation, often described as "pins and needles," in your fingers—this is a normal part of the process.

Sedation can also be used alongside the nerve block to help you relax and feel sleepy during the surgery. The level of sedation can vary, and you might remember all, some, or none of the procedure afterward. You can discuss your sedation options with the anaesthetist during your preoperative assessment.



## Benefits of Regional "Awake" Anaesthesia

- **Reduced risks and side Effects:** By choosing regional anaesthesia, you avoid the common risks and side effects associated with general anaesthesia, such as postoperative drowsiness, nausea, and a sore throat.
- **Quicker recovery:** Your immediate recovery time will be shorter, allowing you to eat and drink sooner after the procedure. This can be particularly beneficial if you have diabetes. Additionally, you may be able to go home earlier.
- **Safer for certain medical conditions:** If you have underlying health issues, such as heart or lung conditions, regional anaesthesia may be a safer option. It places less strain on your body compared to general anaesthesia.
- **Interactive experience:** During keyhole procedures, where a small camera is used to view the inside of the shoulder joint, you may have the option to watch the surgery on a screen and ask questions about your shoulder's condition (though this is entirely optional).



## Possible Side Effects and Risks

Modern anaesthetics, including nerve blocks, are generally very safe. However, there are some potential side effects associated with nerve blocks, which are usually not serious or long-lasting.

**Inadequate block:** Occasionally, the block may not fully numb the area. If this happens, we can provide more local anaesthetic or switch to a general anaesthetic if needed.

**Injection-Specific Risks:**

- **Neck Injection:** May cause temporary hoarseness, a droopy eyelid, vision changes, or mild shortness of breath. These usually resolve as the block wears off.
- **Collarbone Injection:** Rarely (less than 1 in 1,000), it may damage the lung's covering, causing a pneumothorax (air in the pleural space). This might require treatment if symptoms arise. Discuss this risk with your anaesthetist if concerned.
- **All Sites:** Puncturing a blood vessel is common but managed by applying pressure.

**Nerve Damage:** Long-term nerve damage is uncommon, occurring in 1 in 700 to 1 in 5,000 cases. Most patients experience temporary numbness or tingling, which resolves within weeks to a year. Nerve damage can also result from the surgery itself or related factors like position or pre-existing conditions.

**Rare Complications:** Extremely rare risks, such as seizures or other severe events, will be promptly addressed by your anaesthetist.

## Performing the Nerve Block

You will usually be taken to a room near the operating theatre or the anaesthetic room to receive the nerve block. Monitoring equipment will be connected to keep track of your condition throughout the procedure. A cannula (a thin plastic tube) will be inserted into a blood vessel in the arm opposite to the one being operated on. We can offer light sedation while performing the block.

The nerve block injection can be administered in various locations, such as the side of your neck, your armpit, or near your collarbone. In some cases, other nerves may be blocked near the elbow, forearm, wrist, or hand. The skin around the injection site will be cleaned, and a small amount of local anaesthetic will be used to numb the area—this might cause a brief stinging sensation.

Once your skin is numb, a different needle will be used to perform the nerve block. The anaesthetist will guide the needle using an ultrasound machine to ensure the anaesthetic is delivered precisely to the correct nerves. During this process, the anaesthetist may ask if you feel any tingling, "twinges," or an electric shock-like sensation.



It might take more than one attempt to position the needle correctly to ensure that the area is fully numbed. Most people find that the injections are no more painful than having a cannula inserted.

Soon after the injection, your arm will start to feel warm and tingly, eventually becoming heavy and numb. The block usually takes between 20 and 40 minutes to take full effect.

The anaesthetist will check the sensations in different areas to ensure the block is working effectively. You will only be taken to the operating theatre once the anaesthetist is confident that the block is working well.

If the block does not fully take effect, you may be given additional local anaesthetic, more pain relief, or a general anaesthetic as needed.

### **During the Operation**

A screen will be positioned to ensure you cannot see the surgery being performed. You might have the option to listen to your own music on your personal device with headphones during the surgery—be sure to ask if this is possible.

A member of your anaesthetic team will remain with you throughout the procedure, and other team members may also speak with you and assist in your care.

If you are receiving sedation, you will feel relaxed and sleepy. Oxygen will be provided through a light plastic facemask. While you may have some memories of being in the operating theatre, these recollections are often patchy.

### **After the Operation**

The effects of the nerve block can last up to 48 hours. During this time, the arm that was anaesthetised will feel very heavy and will need support until your muscles regain function. You may require assistance with everyday tasks as you recover from the surgery.

As the nerve block wears off, it's normal to experience a tingling sensation "pins and needles" in your fingers.

### **Aftercare at Home**

Before you leave the hospital, you will receive instructions to aid your recovery at home. Be sure to use any supports provided, as you may still have limited sensation in your arm. This numbness, which can last up to 48 hours, increases the risk of injury.

### **Precautions:**

- **Avoid Heat Sources:** Be cautious around heat sources like fires, radiators, or hot water. Since you may not feel heat while your arm is numb, there is a risk of burns.

Visit [www.mkuh.nhs.uk](http://www.mkuh.nhs.uk) for accessibility and translation services.



- **Avoid Machinery:** Do not use machinery or domestic appliances, such as kettles, irons, or cooking equipment, while your arm is numb.

### **Pain Management:**

It is crucial to take your prescribed pain relief medications before the nerve block wears off, as the numbness can end suddenly.

### **Seek Emergency Help If:**

- You experience unexplained breathlessness.
- Severe pain persists despite taking painkillers.

If the numbness from the block has not fully resolved two days after your surgery, please contact the anaesthetic department at (Anaesthetic registrar on-call) on: **01908997747**

### **Frequently Asked Questions**

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

No, you must follow the fasting guidelines provided by the hospital. This is important in case you need a general anaesthetic.

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

No, you can choose between staying awake, being sedated, or having a light anaesthetic along with the nerve block. If you receive sedation or general anaesthesia, you will need someone to pick you up and stay with you for 24 hours.

### **More information:**

You will find more information about nerve blocks on:

[www.rcoa.ac.uk](http://www.rcoa.ac.uk) 'For Patients and Relatives'

For a video on surgery under nerve block:

[https://www.youtube.com/watch?v=GEId1b2\\_KSw](https://www.youtube.com/watch?v=GEId1b2_KSw)





**We encourage patients to be involved in their care by:**

1. Being part of the conversation and shared decision making
2. Asking questions if something is not clear
3. Speaking up if you have concerns

Checks are there to protect you and you can be part of them. Behave with respect and kindness towards healthcare professionals.

We ask for information about you so that you can receive proper care and treatment. This information remains confidential and is stored securely by the Trust in accordance with the provisions of the Data Protection Act 2018/GDPR. Further guidance can be found within our privacy notice found on our Trust website: [www.mkuh.nhs.uk](http://www.mkuh.nhs.uk)

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