

Information for patients

Nerve Blocks for Arm and Shoulder Surgery: What You Need to Know



Hand and Upper Limb

What is a nerve block?

A nerve block is a special injection that helps stop pain during and after surgery. It can sometimes be used instead of putting you fully to sleep (general anaesthetic). It works very well for surgeries on the shoulder, arm, or hand.

This leaflet explains what a nerve block is, how it works, and what the risks are.

What is the brachial plexus?

The brachial plexus is a group of nerves that starts in your neck and goes through your armpit to your arm and hand. These nerves help you move and feel things in your shoulder, arm, and hand.

What is a brachial plexus block?

A brachial plexus block is an injection near these nerves. It helps stop pain during and after surgery.

Depending on where your surgery is, the injection can be given in different places:

- Side of your neck – interscalene block
- Just above your collarbone – supraclavicular block
- Just below your collarbone – infraclavicular block
- In your armpit – axillary block

Sometimes, more injections are done near your elbow or wrist if needed.

Why have a nerve block?

Your doctor might suggest a nerve block for these reasons:

1. To stop pain after surgery

This injection gives very good pain relief. It can help you need less strong pain medicine like morphine, which can have side effects

like feeling sick, itching, or being sleepy. It also helps your physiotherapist start moving your arm sooner to help it heal.

2. To avoid general anaesthetic

Some people have health problems that make general anaesthetic risky. A nerve block can sometimes be used on its own. You might stay awake, or be given medicine to make you sleepy (called sedation). You won't feel pain during surgery.

3. To help healing

The block can increase blood flow to the area, which can help your body heal faster.

Before your surgery

You'll still need to stop eating and drinking before your operation, just like with a general anaesthetic. Even if your operation is planned with only the block, the doctors might still need to use general anaesthetic during surgery.

How is the block done?

- ① When you arrive in theatre, the doctor will put a small plastic tube (called a cannula) into a vein in your hand or arm.
- ② You'll be connected to monitors to check your heart rate, blood pressure, and oxygen level.
- ③ The doctor will clean the skin where the injection goes.
- ④ They will numb your skin with a small injection.
- ⑤ Then they use a thin needle to put the local anaesthetic near the nerves.

The doctor may use:

- A tiny electric current through the needle to find the right nerves – this may make your arm twitch, but it shouldn't hurt.

- An ultrasound machine to help guide the needle safely. Sometimes, the doctor may place a small plastic tube (catheter) next to the nerve to give more anaesthetic over a longer time.

What happens after the block?

- Your arm will feel numb and heavy. You won't be able to move it for about 6 to 12 hours.
- You'll likely go home before the block wears off. Your arm may still be numb, so keep it in a sling to stop it from getting hurt.
- Don't use that arm to touch hot things or drive for at least 2 days, or longer if your doctor says so.

Pain relief after the block wears off

Even when the block is working, you should still take painkillers like:

- Paracetamol
- Ibuprofen (if safe for you)
- Co-codamol (a mix of paracetamol and codeine)

If the pain gets stronger (called breakthrough pain), stronger medicines like morphine or tramadol may be given.

Risks and side effects

Nerve blocks are safe and done by trained doctors, but like all medical procedures, there can be risks:

1. The block might not work fully

Sometimes, not all the nerves are blocked properly. If this happens, you'll be given other pain relief.

2. Problems with the anaesthetic

- Allergies are very rare
- Overdose is unlikely (your doctor works out the right dose for your weight)

- Very rarely, if the injection goes into a blood vessel by mistake, serious problems like seizures or heart issues can happen. Doctors are trained to deal with this quickly.

3. Nearby body parts might be affected

Depending on where the injection goes:

- You might get a hoarse voice, droopy eyelid, or feel light-headed. These go away on their own.
- Rarely, air might leak from a lung. If this happens, you'll be kept in hospital overnight.

Other small risks:

- Bruising or bleeding at the injection site
- Infection (very rare – doctors use antiseptic to clean your skin first)

Can the nerves get damaged?

Nerve damage is **very rare**. It may happen from:

- The needle touching the nerve
- Bleeding or infection near the nerve

If this happens, you might notice:

- Tingling
- Numbness
- Weakness in part of your arm or hand

This usually gets better in **6 weeks to 6 months**. Permanent damage is **very rare**.

Sometimes nerve problems are not caused by the injection, but by:

- The surgery itself
- Pressure on the arm during surgery
- A tourniquet (used to stop blood flow in some surgeries)

- Other medical problems like diabetes or thyroid conditions
- Swelling after surgery

Important things to remember

- Keep your arm in the sling until you can feel and move it again
- Don't use your arm to lift, carry, or touch hot things
- Don't drive for 2 days (or longer if advised)
- Take painkillers even when the block is working

If you require a special edition of this leaflet

This leaflet is available in large print. Arrangements can also be made on request for it to be explained in your preferred language. Please contact the Patient Advice and Liaison Service (PALS) email: rjah.pals.office@nhs.net

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