

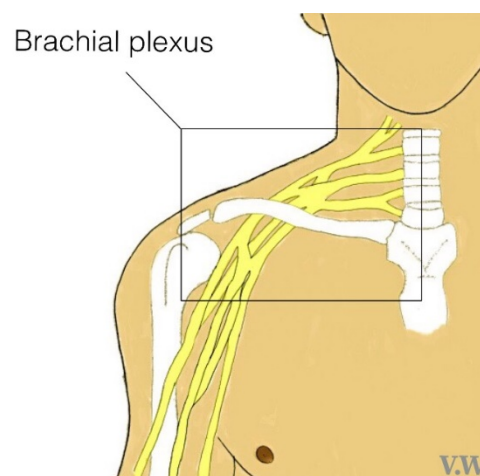
Brachial plexus block

for shoulder, elbow, arm, and hand surgery

This leaflet explains what a brachial plexus block is, and what you can expect if you need one. If you have any further questions or concerns, please speak to a doctor or nurse caring for you.

What is the brachial plexus?

The brachial plexus is the bundle of nerves that supplies your shoulder, arm and hand with feeling and movement (see picture).



What is a brachial plexus block?

It is a when an anaesthetist injects local anaesthetic close to where the nerves run through your neck or shoulder. This is a nerve block, meaning that you temporarily lose the feeling and movement in your arm, so that you can have surgery.

How is the brachial plexus block performed?

You will be given local anaesthetic in the theatre suite. The anaesthetic is injected either into the neck, near the collarbone, or into the armpit, using an ultrasound machine for guidance. Most people find that the injection feels similar to having a blood test. Sometimes, you might experience some pressure at the site of injection, or an electrical sensation in your hand or arm, while the injection is being given.

What will I feel like once I have had the injection?

Once you have the injection, your arm will start to feel warm, heavy and then numb. The numbing effect of the local anaesthetic may take 15-40 minutes to work. When your arm is completely numb, your operation can begin. If you are having shoulder surgery you will have a general anaesthetic (you will be asleep) in addition to the block.

What are the benefits of having a brachial plexus block?

The brachial plexus block provides excellent pain relief. This means that for certain forearm and hand procedures, the surgery can often be performed while you are awake. You can avoid a general anaesthetic and its side effects, and you may be able to leave hospital more quickly. You will also avoid having strong pain killers (like morphine) during surgery which can cause nausea, vomiting and constipation.

The pain relief offered by a brachial plexus block often continues after the operation has finished, allowing you to have physiotherapy which can help your recovery.

What can I do during the operation?

- You can listen to your own portable music devices via headphones.
- You can listen to the music playing in the theatre.
- You can have a conversation with the anaesthetist.

Do I have to be awake during the operation?

If you are feeling anxious, a sedative (drug to make you sleepy) can be given to you while performing the block, or during the surgery. Sometimes, the anaesthetist may offer you a general anaesthetic as well as the nerve block. For example, if you are having shoulder surgery, it is usual to have a nerve block and a general anaesthetic.

What are the risks/side effects?

Generally, serious problems are uncommon. We take great care to avoid the risks below:

- Problems with the anaesthetic. Sometimes, the block may fail to give complete anaesthesia. If this happens, we can give more local anaesthetic as well, to ensure complete numbness. If required, a general anaesthetic can also be given.
- Bruising. All injections can cause bruising and it usually stops with a small amount of pressure.
- Eyelid or voice problems. Injections in the base of the neck may cause you to experience droopy eyelids and/or a hoarse voice. These will disappear when the nerve block wears off.
- Lung problems. A very small number of patients (fewer than one in 1,000) experience damage to their lungs from injections around the collar bone. The chance of this happening is reduced by using the ultrasound for guidance.
- Nerve damage. Less than one in 10 (10%) patients may notice an area of temporary numbness or altered sensation in the arm, shoulder or hand, this will resolve in most patients within 4-6 weeks. The risk of permanent nerve damage is rare (one in 2,000 to one in 5,000 patients). The risk of nerve damage is present in any operation regardless of the type of anaesthetic. This can be due to positioning during the operation or the use of the tourniquet (a tight band placed around the upper arm to prevent bleeding during the operation).
- Extremely rarely, fitting or life-threatening complications may occur.

How long will my arm be numb?

Your arm will be numb for 4-24 hours. We will give you a sling to go home with until you are able to move your arm again.

What should I do while my arm is numb?

Please follow these simple instructions until the nerve block has fully worn off.

Do:

- use your sling (even while you are sleeping) until your arm has regained its normal feeling and movement.
- keep your arm well protected.
- start taking your painkillers regularly, as prescribed, to make sure that you don't experience significant pain once the nerve block wears off.

Don't:

- use any heavy machinery or drive.
- rest your arm near a fire or radiator as you will not notice it burn.
- place your arm anywhere that it may be injured.

Useful sources of information

For more information about the different types of anaesthetic, please ask for our leaflet, **Having an anaesthetic**.

A video of a brachial plexus block, **w:** www.ra-uk.org/index.php/patient-info-video

Important information

If you develop unexplained shortness of breath, or pain that is not well controlled by the painkillers you have been given, go to your nearest Emergency Department (A&E).

If your arm is still numb or if you have any unusual feelings in it 48 hours after your surgery, call **t:** 020 7188 0652, Monday to Friday, 9am-5pm.

Contact us

If you have any questions or concerns, contact the consultant anaesthetist, **t:** 020 7188 0652, Monday to Friday, 9am-5pm.

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit www.guysandstthomas.nhs.uk/leaflets

Pharmacy Medicines Helpline

If you have any questions or concerns about your medicines, please speak to the staff caring for you or call our helpline. **t:** 020 7188 8748, Monday to Friday, 9am-5pm

Your comments and concerns

For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS). To make a complaint, contact the complaints department.

t: 020 7188 8801 (PALS) **e:** pals@gstt.nhs.uk
t: 020 7188 3514 (complaints) **e:** complaints2@gstt.nhs.uk

Language and accessible support services

If you need an interpreter or information about your care in a different language or format, please get in touch. **t:** 020 7188 8815 **e:** languagesupport@gstt.nhs.uk

NHS 111

Offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day. **t:** 111 **w:** 111.nhs.uk

NHS website

Online information and guidance on all aspects of health and healthcare, to help you take control of your health and wellbeing. **w:** www.nhs.uk

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