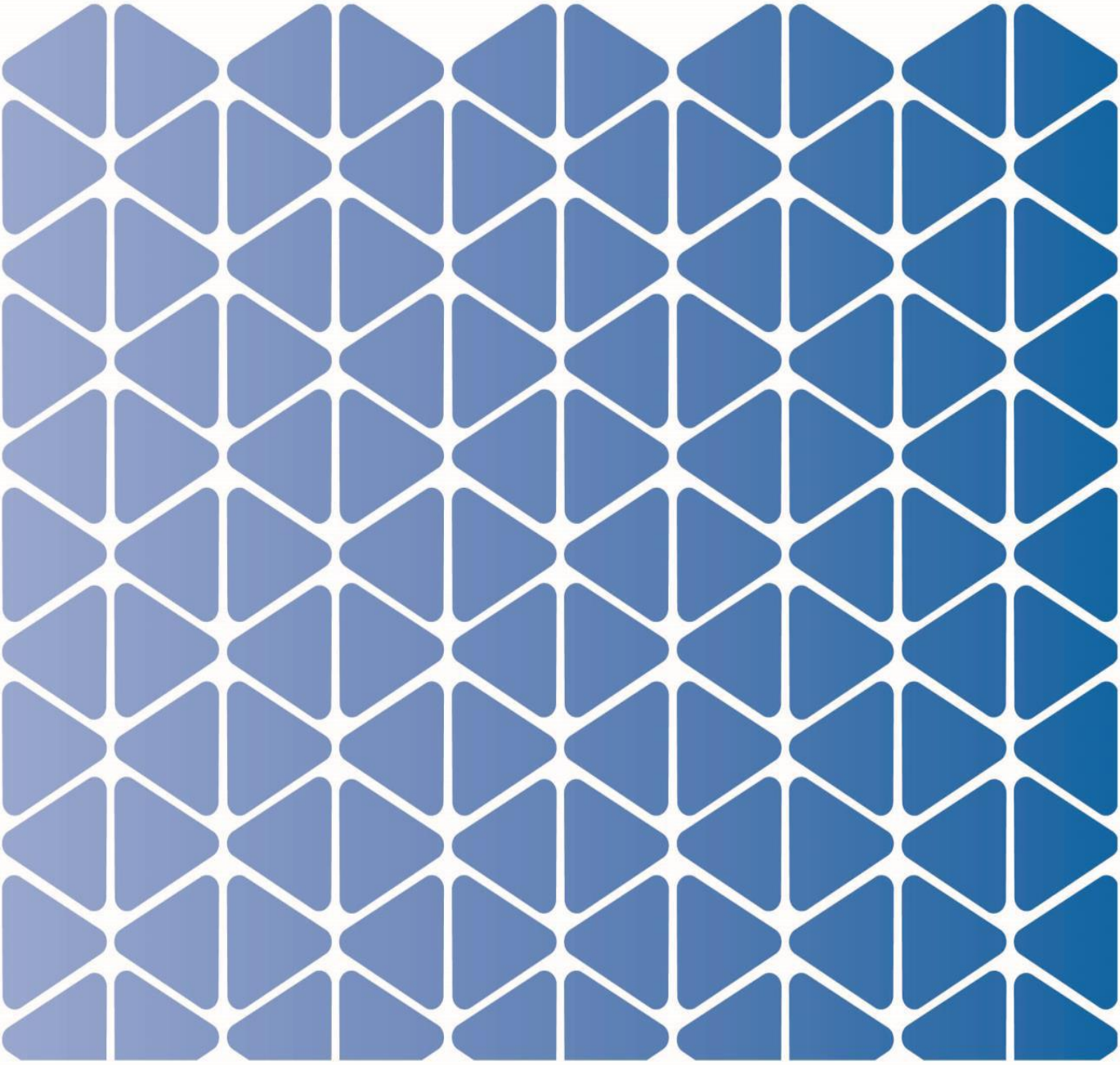
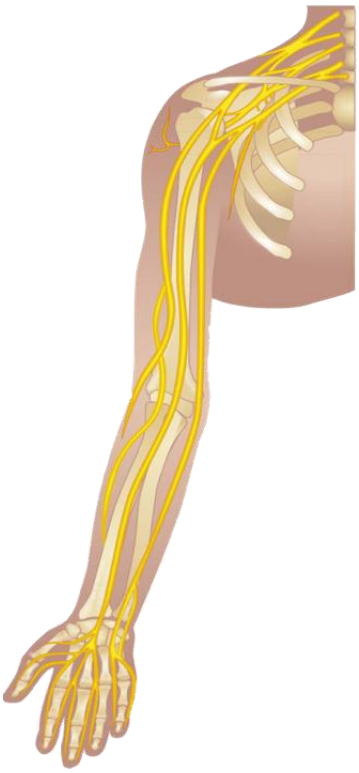
PATIENT INFORMATION

Worcestershire Acute Hospitals NHS Trust

BRACHIAL PLEXUS BLOCK

Regional Anaesthesia for Shoulder, Hand and Forearm surgery





What is a brachial plexus block?

The brachial plexus is the group of nerves that lies between your neck and your armpit. It contains all the nerves that supply movement and feeling to your arm – from your shoulder to your fingertips.

A brachial plexus block is an injection of local anaesthetic around the brachial plexus. It 'blocks' information travelling along these nerves. It is a type of nerve block. Your arm becomes numb and immobile allowing surgery to proceed without the need to go to sleep for the operation.

A brachial plexus block rarely affects the rest of the body so it is particularly advantageous for patients who have medical conditions which put them at a higher risk for a general anaesthetic.

What are the benefits of having a nerve block?

- **Excellent pain relief**
  - It can provide excellent pain relief for up to 24hours after surgery, although some areas may feel numb for up to 48hours.
- **Less need for opioid pain killers**
  - Less need for pain killers containing opioids in the period immediately after surgery.
  - These can make you feel sick and may cause constipation.
- **Avoiding a general anaesthetic**
  - Having a nerve block may allow you to avoid a general anaesthetic, including its risks and side effects.
  - The common side effects include sickness, sore throat and drowiness.
  - This can be particularly useful for patients who have medical condition which put them at a higher risk from a general anaesthetic.
- **Earlier mobilisation and discharge home**
  - Being able to get up sooner and move around earlier and leave hospital sooner.

What are the risks of having a nerve block?

Risks explained:
Your anaesthetist will be experienced in performing nerve blocks, and the vast majority of patients will have no problems. However, all medical procedures carry some risks. Any questions can be raised with your anaesthetist on the day of your operation.

Incomplete or ineffective nerve block

- This is ***fairly common*** (around 1 in 20) are not always completely effective, sometimes the local anaesthetic does not spread to all the nerves. If ineffective, another form of anaesthetic and/or pain relief will be used.

Bruising or bleeding

- Mild bruising around the site of the nerve block is common and will resolve. Bleeding from larger blood vessels is ***uncommon*** and can be dealt with at the time by the anaesthetist.

Risk due to local anaesthetic drugs

- Allergic reactions are ***rare*** and less likely than with general anaesthetics.
- Serious problems including fits, heart or breathing problems can happen but they are ***very rare***. Your anaesthetist is trained to deal with these emergencies.

Risk of nerve damage

- A nerve block usually wears off within 24 hours. It is ***fairly common*** (around 1 in 20) to have a slightly prolonged area of numbness/ tingling lasting beyond 48 hours. Patients commonly notice areas of tingling and/or numbness in the arm, shoulder or hand. Usually these symptoms will resolve within days, weeks, or months but rarely this can be permanent.
- It is difficulty to accurately measure the risk of long-term nerve damage due to it happening infrequently. Studies have estimated that it happens between 1 in 15,000 and 1 in 30,000. Therefore risk of permanent nerve damage is **rare.**
- There is a risk of nerve damage after any operation regardless of the type of anaesthetic technique used. This can be due to the operation, the position you lie in or the use of a tourniquet (a tight band on the upper arm, which prevents bleeding during the operation). Swelling around the operation site or a pre-existing medical condition, such as diabetes, may also contribute to nerve damage.

How is the nerve block done?

- The local anaesthetic injection is performed in the theatre suite.
- A small plastic tube (cannula) will be inserted into the back of your hand.
- Routine monitoring of heart rate, blood pressure and blood oxygen levels will be started.
- The skin around the injection site will be cleaned and a small injection of local anaesthetic will be used to numb your skin.
- To help locate the nerve, the anaesthetist will use an ultrasound machine.
- Most people find that the injection is no more painful than having a cannula inserted into a vein. When the needle is inserted, your anaesthetist will ask if you feel any tingling or an electric shock sensation.
- Your arm will start to feel warm and tingly before finally feeling heavy and numb. The injection typically takes between 20 and 30 minutes to work. The anaesthetist will check the sensations you can feel at different places. You will not be taken to theatre until the anaesthetist is happy that the block is working well.
- If the block does not work fully, you will be offered more local anaesthetic, additional pain relief, or a general anaesthetic.

During the operation

A screen will be positioned in such a way that you cannot see the surgery being done. A member of staff will sit with you during the operation. Your anaesthetist remains close by. Please feel free to bring in a personal music player with headphones if you would like to listen to music during the operation.

An operating theatre is a busy place – there will typically be between five and eight people in theatre, each with their own role in helping look after you.

After the operation

Following the operation, you may return from the operating theatre with a sling or temporary splint. While you are in the recovery area or ward, the staff will make sure your arm is protected from injury.

Aftercare at home

You should use any supports you are given once back at home. This is because you will not have full sensation in the area of the surgery, and it can get injured. This numbness may commonly last up to 48 hours. Take special care around heat sources, such as fires or radiators. You will not feel heat while the body part is numb, and you may burn yourself. Avoid using any machinery or domestic appliances, such as kettles, irons and cooking equipment.

As the block wears off you can expect to feel tingling as sensation returns, you may begin to feel more discomfort. Start taking your pain relief medicines before the block

wears off and as instructed by the hospital. Staff will give you more details about what and when to take them after your operation.

You will need to seek help from the emergency medical services if:

- you notice unexplained breathlessness
- you experience severe pain that is not controlled by your tablets

If the nerve block has not fully worn by 48 hours after the operation, you should contact the Anaesthetic Department secretaries at Worcester Royal Hospital via the hospital switchboard who will direct your call appropriately.

Please scan this QR code for a short video on information about anaesthesia for hand surgery.

If your symptoms or condition worsens, or if you are concerned about anything, please call your GP, 111, or 999.

Patient Experience

We know that being admitted to hospital can be a difficult and unsettling time for you and your loved ones. If you have any questions or concerns, please do speak with a member of staff on the ward or in the relevant department who will do their best to answer your questions and reassure you.

Feedback

Feedback is really important and useful to us – it can tell us where we are working well and where improvements can be made. There are lots of ways you can share your experience with us including completing our Friends and Family Test – cards are available and can be posted on all wards, departments and clinics at our hospitals. We value your comments and feedback and thank you for taking the time to share this with us.

Patient Advice and Liaison Service (PALS)

If you have any concerns or questions about your care, we advise you to talk with the nurse in charge or the department manager in the first instance as they are best placed to answer any questions or resolve concerns quickly. If the relevant member of staff is unable to help resolve your concern, you can contact the PALS Team. We offer informal help, advice or support about any aspect of hospital services & experiences.

Our PALS team will liaise with the various departments in our hospitals on your behalf, if you feel unable to do so, to resolve your problems and where appropriate refer to outside help.

If you are still unhappy you can contact the Complaints Department, who can investigate your concerns. You can make a complaint orally, electronically or in writing and we can advise and guide you through the complaints procedure.

How to contact PALS:

Telephone Patient Services: 0300 123 1732 or via email at: wah-tr.PALS@nhs.net

Opening times:

The PALS telephone lines are open Monday to Friday from 8.30am to 4.00pm. Please be aware that you may need to leave a voicemail message, but we aim to return your call within one working day.

If you are unable to understand this leaflet, please communicate with a member of staff.