Calderdale and Huddersfield NHS Foundation Trust

Anaesthetic Department

Nerve blocks for surgery on the shoulder, arm or hand

Information for patients and families

This leaflet is for anyone who is thinking about having a nerve block for an operation on the shoulder, arm or hand. It will be of particular interest to people who would prefer not to have a general anaesthetic.

The leaflet has been written with the help of patients who have had a nerve block for their operation.

You can find more information leaflets on the website www.rcoa.ac.uk/patientinfo. The leaflets may also be available from the anaesthetic department or pre-assessment clinic in your hospital.

The website includes the following:

- **Anaesthesia explained (a detailed booklet about all types of anaesthetics)**
- **You and your anaesthetic (a shorter summary).**
- **Your spinal anaesthetic.**
- **Anaesthetic choices for hip or knee replacement.**
- **Epidural pain relief after surgery.**
- **Local anaesthesia for your eye operation.**
- **Your child's general anaesthetic.**
- **Your anaesthetic for major surgery with planned high dependency care afterwards.**
- **Your anaesthetic for a broken hip.**

Risks associated with your anaesthetic

This is a collection of 14 articles about specific risks associated with having an anaesthetic or an anaesthetic procedure. It supplements the patient information leaflets listed above and is available on the website: www.rcoa.ac.uk/patients-and-relatives/risks.



Throughout this booklet we use this symbol to highlight key points of information.

compassionate care

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.

You can then have your operation without feeling any pain. The block can also provide excellent pain relief for between 3 and 24 hours, depending on what kind of local anaesthetic is used.

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.



A brachial plexus block may be combined with a general anaesthetic or with sedation. This means you have the advantage of the pain relief provided by a brachial plexus block, but you are also unconscious or sedated during the operation.

Your anaesthetist can explain what is possible and what might be best for you.

Other nerve blocks

If your operation is on the hand or forearm, it may be possible to do a nerve block on nerves further down the arm, closer to the hand. Your anaesthetist can tell you more.

Having the injection



You need to prepare for the operation by not eating or drinking. The hospital should give you clear instructions about this.

You will go to a room near the operating theatre to have the local anaesthetic injection. The injection for a brachial plexus block is in the side of your neck, or in your armpit, or close to your collar bone. Other nerves can be blocked near the elbow, or in the forearm, wrist or hand.

Sedation may be given before the injection is done. This is when drugs are given which help you relax. If you are having a general anaesthetic as well, this may be given before or after the injection.

The skin around the injection site is cleaned. A small injection of local anaesthetic numbs the skin. The nerves are located using an ultrasound machine or by using a small machine that makes your arm twitch.

Using ultrasound we are able to see your nerves, the needle and the local anaesthetic surrounding the nerve. This ensures the best chances of a successful block.



Most people find that the injection is no more painful than having a cannula inserted into a vein (see www.rcoa.ac.uk/document-store/you-and-your-anaesthetic page 7 for information about a cannula).

Your arm will start to feel warm, heavy and numb. The injection takes between 20 and 40 minutes to work.

Sometimes the block does not work fully. If this happens, you will be offered more local anaesthetic, additional pain relief, sedation or a general anaesthetic, or rarely the surgery may need to be postponed.

During the operation

A screen is used, so you cannot see the operation being done, unless you want to.

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 usually be between five and eight people in theatre, each with their own role in helping look after you.

If you are having sedation, you will be relaxed and drowsy. You may be given oxygen through a light plastic facemask. You may have some memories of being in the operating theatre, although these will probably be patchy.

If you have a general anaesthetic you will not remember anything about being in the operating theatre.

Benefits of a brachial plexus block and other nerve blocks

- Better pain relief afterwards. There may be less need for strong pain relief medicines which make some people feel quite sick and unwell.
- Avoiding a general anaesthetic, including its risks and side effects. The common side effects of a general anaesthetic include sickness, sore throat and drowsiness.
- Often able to leave hospital sooner.

Side effects and risks

- Injection in the side of the neck: hoarse voice, droopy eyelid, some difficulty breathing. These resolve as the block wears off.
- Injection around the collar bone: less than 1 in a thousand risk of damage to the covering of the lung. Your anaesthetist will discuss this with you.
- All injection sites: infection of the tissues around the nerves, the nerves themselves, and/or damage to blood vessels, which usually resolves with simple compression to stop any bleeding.
- Very rarely: having a fit or another life threatening event may occur. Your anaesthetist will manage these promptly. They can tell you more about these very rare events.

Nerve damage

- The risk of long-term nerve damage caused by a brachial plexus block is difficult to measure precisely. Studies show that it happens in between 1 in 700 and 1 in 5,000 blocks.
- If you have a block lower down the arm, the risk of nerve damage and its consequences may be less.
- Nerve damage can cause muscle weakness and/or numbness. This can be temporary or permanent.

- About 1 in 10 patients notice a prolonged patch of numbness or tingling in their arm. These symptoms will resolve in 95% of these patients within four to six weeks, and in 99% within a year.
- There is a risk of nerve damage after any operation regardless of whether you have had a block. This can be due to the operation, the position you lie in or the use of a tourniquet (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.

For more information on nerve damage visit:
www.rcoa.ac.uk/document-store/nerve-damage-associated-peripheral-nerve-block.

After the operation

During the time the block is working you will not be able to use your arm. You will probably be given a sling and you may need someone to help you look after yourself.



You should start taking pain relief medicines while your arm is still numb and before the block wears off. This is so that they start working ready for when the block wears off.

As the block wears off you may experience pins and needles in your fingers – this is normal.

Aftercare

You should:



- keep your arm in the sling you are given, for support and protection. You will not be fully aware of the position of your arm – so it can be injured without you realising.



- be especially careful around heat sources, such as fires or radiators. You will not feel heat while your arm is numb and burns can happen.
- avoid use of any machinery or domestic appliances. Injury is possible while you cannot feel your arm.
- start taking your pain relief medicines before the block wears off. This is important as the pain can appear quite suddenly.

Further help



You will need to seek help from the emergency medical services if you notice unexplained breathlessness, or severe pain that is not controlled by your codeine or sevredol tablets. If the block has not fully worn off by 48–72 hours after the operation you should contact the anaesthetic department secretaries, leaving a voicemail if necessary, on:

Calderdale Royal Hospital	01422 224077
Huddersfield Royal Hospital	01484 347232

Questions you may like to ask your anaesthetist

1. Who will be doing the injection?
2. Who will stay with me during the operation?
3. What happens if the block does not work and I can feel something? How often does this happen?
4. Do I have any particular risks for having this kind of anaesthetic?
5. Do I have increased risk for a general anaesthetic, which I might have instead of a brachial plexus block?
6. When will my arm feel normal again?
7. Who should I call if I am concerned about the after effects of the block?

Tell us what you think

We welcome any suggestions to improve this booklet.

You should send these to:

The Royal College of Anaesthetists
Churchill House
35 Red Lion Square
London WC1R 4SG
email: comms@rcoa.ac.uk

The Association of Anaesthetists of Great Britain and Ireland (AAGBI)

The Royal College of Anaesthetists (RCA)

Regional Anaesthesia United Kingdom

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If you have any comments about this leaflet or the service you have received you can contact :

The Department of Anaesthesia
Calderdale and Huddersfield NHS Trust
Telephone number 01484 347232

www.cht.nhs.uk

If you would like this information in another format or language contact the above.

Potřebujete-li tyto informace v jiném formátu nebo jazyce, obraťte se prosím na výše uvedené oddělení

Jeżeli są Państwo zainteresowani otrzymaniem tych informacji w innym formacie lub wersji językowej, prosimy skontaktować się z nami, korzystając z ww. danych kontaktowych

ਜੇ ਤੁਸੀਂ ਇਸ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਪ੍ਰਾਰੂਪ ਜਾਂ ਭਾਸ਼ਾ ਵਿੱਚ ਲੈਣਾ ਚਾਹੁੰਦੇ ਹੋ,
ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਉਪਰੋਕਤ ਵਿਭਾਗ ਵਿੱਚ ਸਾਡੇ ਨਾਲ ਸੰਪਰਕ ਕਰੋ।

اگر آپ کو یہ معلومات کسی اور فارمیٹ یا زبان میں درکار ہوں، تو
براہِ مہربانی مندرجہ بالا شعبے میں ہم سے رابطہ کریں۔

"إذا احتجت الحصول على هذه المعلومة بشكل مغاير أو مترجمة إلى لغة مختلفة فيرجى منك الاتصال بالقسم المذكور أعلاه"

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