

Anaesthesia for hand surgery



Who is this leaflet for?

Your surgeon has recommended an operation for your hand injury. The surgery needed is too extensive to be performed under local anaesthetic only, so they will be working alongside an anaesthetist.

This leaflet explains about having a nerve block – the typical anaesthetic you will be offered for the operation on your hand.

For most injuries, anaesthetising just your arm with a 'nerve block' is a great way to have your surgery done, and is recommended by the British Society for Surgery of the Hand.

If you wish this can be done under sedation to reduce any anxieties you may have, whilst avoiding being made fully unconscious.

What is a nerve block?

This involves injecting local anaesthetic around the nerves going to your arm, to make your arm numb for surgery and to provide pain relief after your operation.

What are the benefits of having surgery under a nerve block?

You will avoid the side effects of a general anaesthetic. Although serious complications are rare when having a general anaesthetic, nausea, vomiting and sore throat are common afterwards. Confusion after a general anaesthetic is increasingly recognised, especially in the elderly. With a nerve block you are also less likely to need to stay in hospital overnight.

You should have excellent pain relief for some hours after the nerve block – what would otherwise be the most painful part of your recovery. Please take regular simple painkillers such as paracetamol and ibuprofen (unless you've been told to avoid this by a health professional), to smooth the transition when the nerve block wears off.

What are the risks or complications of nerve blocks?

Although the risk from nerve blocks is very small, occasionally complications can occur. These include:

- infection
- bruising/bleeding
- local anaesthetic reactions
- inadequate block leading to conversion to a general anaesthetic
- less than 1 in 1,000 risk of damage to the covering of the lung
- nerve damage (sensation or movement).

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. Permanent damage is rare and difficult to quantify: somewhere between 1 in 2000 to 1 in 5000. This is similar to the risk of nerve damage from general anaesthesia.

What about general anaesthesia (being made unconscious)?

Even though we recommend nerve blocks for most hand surgeries, we are able to provide general anaesthetics.

General anaesthesia is recommended if it is too risky for us to offer nerve blocks – usually if you take blood thinners such as warfarin or rivaroxaban.

For other patients general anaesthesia may be disproportionately risky and a nerve block will be especially strongly recommended – typically if you have severe heart or lung disease.

How are nerve blocks performed?

1. A small intravenous line (drip) will be put into a suitable vein, if there is not one already in place.
2. You will be attached to routine monitoring which will measure your pulse, heart-rate and oxygen levels.
3. You may have some sedative medication to make you more relaxed if you wish.
4. The nerves that supply your arm and hand can be blocked either in your armpit or above your collarbone. Longer-acting local anaesthetic may be put around the nerves in your forearm. Your nerve block will be carried out by an anaesthetist trained in the technique.
5. A cold sterilising spray will be used. Local anaesthetic through a tiny needle is used to numb the skin – this may sting for a few seconds before it goes numb. A fine needle is guided towards the nerves and local anaesthetic is injected to block them. You may feel some pushing and pulling, and a sensation of pressure or fullness as this is done.
6. Your arm will start to feel tingly, warm, numb and weak quite soon after the injection. You may also lose track of where your arm is as your nerves can no longer tell you where it is.

The anaesthetist will test the block to check that the operation can proceed. Occasionally a 'top-up' of the local anaesthetic is needed to ensure the block is complete.

7. The procedure can now take place. You may feel some movement in your shoulder and arm as the surgeon operates.

What happens afterwards?

When the operation is finished you will go back to the Trauma Ward, possibly after a short period in our Recovery Area.

If you have had a nerve block your arm will be numb and weak for several hours. Typically we use short acting local anaesthetic for the whole arm, and longer acting local anaesthetic for the areas of your hand with the injury. If the numbness or weakness lasts more than 48 hours, call the numbers at the end of this leaflet. You will need to protect your arm until full sensation has returned as you won't feel pain in it. It is usual to feel tingling as the sensation returns.

If you have had sedation or a general anaesthetic, you will be allowed home once you are alert and orientated, and have an adult to accompany you home and stay with you over the night following the operation.

We encourage you to buy your own simple painkillers to take after your operation. We are able to give you painkillers to take home, but it will take longer to discharge you as we wait for the hospital pharmacy to issue the medication. If we anticipate that you'll need stronger pain killers we will provide these for you.

Further information

- More detailed information leaflets on both nerve blocks and general anaesthesia are available on the Royal College of Anaesthetists' website:
www.rcoa.ac.uk/patientinfo
- You may wish to watch a video for patients explaining nerve blocks:
www.ra-uk.org/index.php/patient-info-video/video/nerve-blocks-an-information-video-for-patients.
- Alternatively try searching for 'RA-UK patient video'. Free hospital wifi is available for you to use your own device.

Contact us

If you have any concerns once home, please call one of the number below:

Anaesthetic Department (Mon-Fri 8am-5pm)
01872 258676 / 258195

Emergency Department (24 hours)
01872 253111 / 253113

Email: youranaesthetic@cornwall.nhs.net

This publication includes text taken from the Royal College of Anaesthetists' (RCoA) leaflet 'Nerve blocks for surgery on the shoulder, arm or hand, 2015' but the RCoA has not reviewed this as a whole.

If you would like this leaflet in large print, braille, audio version or in another language, please contact the General Office on 01872 252690

