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Patient Information for Consent

Peripheral Nerve Block (Upper Limb)

What is a peripheral nerve block?

A peripheral nerve block is a type of regional anaesthetic that involves injecting local anaesthetics and other painkillers near the major nerves to your arm (upper limb). A nerve block for your arm can be used on its own while you are awake, with sedation, or with a general anaesthetic. A nerve block is often used after the operation to give pain relief.

The nerve block will be given to you by an anaesthetist (doctor trained in anaesthesia). Your anaesthetist is usually assisted by a specially-trained healthcare practitioner.

A nerve block has been recommended for you. However, it is your decision to go ahead with a nerve block or not.

This document will give you information about the benefits and risks to help you to make an informed decision. If you have any questions that this document does not answer, ask your anaesthetist or the healthcare team.

How does a nerve block work?

A nerve block works by temporarily numbing your nerves to give pain relief. Local anaesthetics and other painkillers are injected, using a fine needle, near the nerves to your arm. You may need more than one injection.

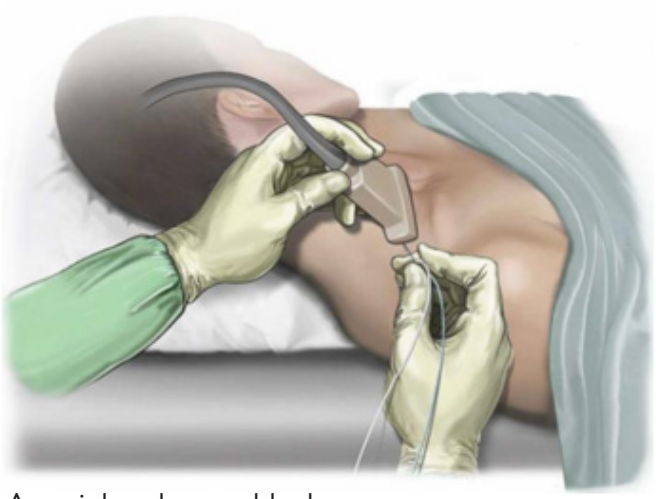
A nerve block can be used instead of a general anaesthetic for the operation, and is also an effective form of pain relief afterwards. Depending on the operation, the injection may be given in the side of your neck, or near your collarbone or armpit, or in your elbow, forearm or wrist.

Your anaesthetist will tell you where they are going to give you the injection.

What will happen if I decide not to have a nerve block?

If you decide not to have a nerve block, your anaesthetist may be able to suggest other methods of pain relief. During and after the operation you may need more painkillers that are more likely to make you feel sick or drowsy.

There may be clinical reasons not to use a nerve block, such as having an allergy to the type of anaesthetic or materials used, or an infection at the site where the needle will be inserted.



A peripheral nerve block

What does the procedure involve?

Do not eat in the 6 hours before the procedure. You may drink small sips of water up to 2 hours before. If you have diabetes, let the healthcare team know as soon as possible. You will need special advice depending on the treatment you receive for your diabetes.

Your anaesthetist may offer you a sedative to help you to relax. They will give it to you through a small needle in your arm or the back of your hand. Your anaesthetist will ask you to lie on your back. The healthcare team will monitor your oxygen levels and heart rate using a finger or toe clip. If you need oxygen, they will give it to you through a mask or small tube under your nostrils.

Your anaesthetist will usually use an ultrasound scanner or nerve stimulator to help guide them where to inject the anaesthetic. The nerve stimulator may make your arm twitch. This is not painful.

Your anaesthetist will inject local anaesthetic into the area where they will insert the needle for your nerve block. This stings for a moment but will make the area numb, allowing your anaesthetist to give you the nerve block with much less discomfort for you.

Your anaesthetist will insert the needle and when they are certain that it is in the right position they will inject anaesthetic through it. They will usually remove the needle.

Sometimes your anaesthetist may insert a small tube through the needle before they remove it, leaving the tube in place so they can inject more anaesthetic.

You can help your anaesthetist by keeping still while they insert the needle. It should not be painful, although it can be uncomfortable. If you feel pain, let your anaesthetist know.

What effect does a nerve block have?

The effect of the nerve block can be varied by changing the type and amount of anaesthetic given. A nerve block has two main effects.

- Pain relief – The nerve block numbs the sensory nerves responsible for pain and touch. This gives pain relief but can also make your arm feel numb and heavy. Pain nerves are easier to block than touch nerves so although you may be able to feel someone touching or pulling you, it should not hurt.
- Weakness – The nerves supplying muscles may also be affected. This can make it difficult for you to move your arm.

If you are having an operation using only a nerve block, it will not start until you and your anaesthetist are satisfied that the nerve block is working well.

Sometimes surgery takes longer than expected and the nerve block starts to wear off. Your anaesthetist may repeat the injection or recommend a general anaesthetic.

Your anaesthetist will tell you how long to expect your arm to feel numb and heavy. A nerve block can last up to 24 hours. While your arm is numb you need to be careful to avoid hot or sharp objects. It may be best to wear a sling.

A peripheral nerve block gives good pain relief but, like other forms of pain relief, cannot guarantee that you will be pain-free. The healthcare team will try to reduce your pain once the nerve block has worn off. They may give you medication to control the pain and it is important that you take it as you are told.

What can I do to help make the operation a success?

Keeping Warm

It is important to keep warm around the time of the operation. Your anaesthetist will take steps to keep you warm when you are having the operation.

The hospital may be colder than your home, so bring extra clothing or a dressing gown. If you become too cold you may have a higher risk of developing complications such as an infection of the surgical site (wound) or heart problems. Let the healthcare team know if you feel cold

Lifestyle changes

If you smoke, stopping smoking now may reduce your risk of developing complications and will improve your long-term health.

Try to maintain a healthy weight. You have a higher risk of developing complications if you are overweight.

Regular exercise should help to prepare you for the operation, help you to recover and improve your long-term health. Before you start exercising, ask the healthcare team or your GP for advice.

What complications can happen?

Your anaesthetist will try to reduce the risk of complications.

Any numbers which relate to risk are from studies of people who have had a nerve block. Your anaesthetist may be able to tell you if the risk of a complication is higher or lower for you.
Some complications can be serious and can even cause death.

You should ask your anaesthetist if there is anything you do not understand.

- Change in your breathing, where the nerve that controls your diaphragm is affected. The healthcare team will monitor your breathing and oxygen levels and will give you oxygen if you need it. Your breathing will improve as the anaesthetic wears off.
- Failure of the nerve block. Most nerve blocks work well first time. If not, your anaesthetist may repeat the injection or recommend a general anaesthetic.
- Allergic reaction to local anaesthetics. This is unusual. Many people have been told, or think, they are allergic to local anaesthetic given at the dentist. This is rare but let your anaesthetist know if you have reacted to sulphites or to any medications or tests in the past.
- Bleeding, if the needle used to inject the local anaesthetic strikes a blood vessel. This usually results in a small bruise that will not cause problems.
- Nerve damage. This is usually temporary, with symptoms of numbness, 'pins and needles' or weakness lasting up to 12 weeks (risk: less than 1 in 300). Sometimes the damage can last longer than 6 months (risk: less than 1 in 1,000) or be permanent (risk: 1 in 10,000).
- Visual disturbance or loss of vision, if steroids are included in the injection. This is rare and can happen if the steroids affect your retina (light-sensitive layer at the back of your eye). Let the healthcare team know straightaway if you develop any problems with your vision.
- Local anaesthetic toxicity, if the local anaesthetic is accidentally injected into your bloodstream or if it is absorbed into your bloodstream too quickly. This usually makes only your lips tingle or your ears ring. You may feel light-headed and have a seizure (risk: less than 1 in 500). The dose of anaesthetic is always limited to reduce this risk.
- Pneumothorax, where air escapes into the space around your lung (risk: less than 1 in 2,000 if the injection is given in the side of your neck or near your collarbone). A pneumothorax is usually small and does not cause any problems. If a lot of air escapes, this can cause a large pneumothorax. The air will need to be sucked out using a needle (aspiration) or let out by inserting a tube in your chest(chest drain). You will need to stay in hospital for 1 to 2 days. If you suddenly become short of breath or have severe chest pain while at home, let your doctor know straightaway.
- Droopy eyelid on the side of the nerve block, if the injection is given in the side of your neck (risk: up to 1 in 50). This usually improves as the anaesthetic wears off.
- Developing a hoarse voice, if the injection is given in the side of your neck. This usually improves as the anaesthetic wears off.

Summary

A peripheral upper limb nerve block can be used for most people, usually giving a safe and effective

form of pain relief both during and after the operation. However, complications can happen. You need to know about them to help you to make an informed decision about the anaesthetic. Knowing about them will also help to detect and treat any problems early.

Keep this information document. Use it to help you if you need to talk to the healthcare team.

Some information, such as risk and complication statistics, is taken from global studies and/or databases. Please ask your surgeon or doctor for more information about the risks that are specific to you.

This document is intended for information purposes only and should not replace advice that your relevant healthcare team would give you.