

Identification patient

Peripheral nerve blocks

What is a peripheral nerve block?

A peripheral nerve block anaesthetises nerves or nerve nodes. The anaesthetist injects a local anaesthetic around one or more nerves, in order to anaesthetise a limb or part of a limb. You remain conscious during this procedure, to enable communication and ensure that the injection is administered safely. It is usually followed by a general anaesthesia, so that the surgery can be performed.

The most common blocks are:

- Interscalene block: Injection in the neck to anaesthetise the shoulder and upper arm
- Supraclavicular block: Injection above the collarbone to anaesthetise the arm/hand
- Femoral block: Injection in the groin to anaesthetise the front of the knee
- Popliteal block: Injection at the back of the knee to anaesthetise the foot

What are the **advantages** of a peripheral nerve block?

- The patient benefits from long-lasting, effective post-operative pain relief, without the need for, or with minimal use of, additional painkillers.
- It eliminates or reduces the need for strong painkillers, which often have more side effects.

Is it **safe**?

A nerve block is positioned with the aid of ultrasound and nerve stimulation. Ultrasound enables us not only to see and identify the nerve structures, but also the surrounding structures, so that we can be certain where we are placing our needle. Once the needle has been put in place, the position is usually checked, with the aid of a nerve stimulator. These two techniques almost completely eliminate the risks that used to be associated with nerve blocks.

Some possible risks are:

- Injection into a blood vessel or the local anaesthetic being absorbed too quickly into the bloodstream.
- Injection into a nerve/damage to the nerve. If this occurs, the nerve problems are usually temporary (e.g. long-lasting numbness or reduced muscle strength affecting a particular group of muscles). Permanent nerve damage, such as paralysis, is extremely rare.
- Allergic reactions: Any drug can cause an allergic reaction, ranging in severity from a minor skin reaction to anaphylactic shock. The latter, however, is very rare.

Who decides whether I can have a nerve block?

The surgeon who will be operating on you is best able to discuss **with you** what sort of anaesthetic is appropriate for a particular surgical procedure. There may, however, be certain reasons why your anaesthetist decides not to administer a local anaesthetic. Those reasons might include:

- You are too tense, so are not able to cooperate fully when the anaesthetic is administered.
- There is inflammation at/in the area surrounding the injection site, or the injection site is dirty/untidy; this increases the likelihood of infection.
- You have a disease of/damage to the nervous system which means that, should nerve damage be sustained after the injection, it wouldn't be possible to tell whether it was caused by your illness or the injection.

In this case, the anaesthetist and surgeon will discuss this with you, and suggest an alternative.

Does it hurt when a nerve block is administered?

Injecting a peripheral block causes little or no pain. If it is too painful for you, or the actual injection of the anaesthetic causes twinges of pain, you must tell the anaesthetist. Sometimes, you may experience some pain or bruising at the site of the injection the day after.

What should I bear in mind after surgery involving a peripheral nerve block?

When a leg has been anaesthetised, bed rest is compulsory while the leg is still numb. The first time you get out of bed, you must be supervised by a nurse.

When an arm has been anaesthetised, you will usually be given a sling or bandage. It is best to wear the sling until normal sensation is restored in your arm. This will be monitored by the surgeon.

For the first 24 hours after an anaesthesia (general or local), you must not drive any vehicle, operate any machinery or engage in any hazardous activities.

It is best for you to start taking the prescribed pain relief as soon as feeling returns to the anaesthetised area, before the actual sensation of pain is restored. This ensures you stay one step ahead of the pain.

If you have any further questions, you can always contact the anaesthesia service, which is open every day between 4.00 and 6.00 p.m. (except Tuesdays) at the AZ Monica Campus Antwerp. No appointment is necessary. You can also discuss any straightforward questions with your anaesthetist before the procedure.

Department of Anesthesia AZ Monica Campus Antwerpen

Please provide your signature and name,

(so that we know that you have read and understand these guidelines)

