



Local anaesthetic ‘nerve block’ injection for neuropathic pain: information for families

A nerve block is an injection of local anaesthetic and corticosteroid around the nerve(s) that are causing problems. This is often called a ‘nerve block’ as it interrupts pain signals being sent to the brain. This information sheet from Great Ormond Street Hospital (GOSH) explains about an injection to reduce neuropathic (nerve) pain in children and young people. It also describes the procedure and what to expect when your child comes to GOSH to have the injection. An Easy Read information sheet for your child is also included.

A nerve block is an injection of local anaesthetic and corticosteroid around the nerve(s) that are causing problems. If your child has ‘neuropathic’ pain this means that the nerves in the affected area are sending unhelpful pain messages to the brain, even though there is nothing wrong physically.

Some people find a ‘nerve block’ very helpful in reducing pain by interrupting how pain signals are sent to the brain. It is a minor procedure and there are many different types of nerve block, each aimed at a different group of nerves. Your doctor will discuss whether a nerve block is suitable for your child and which type might be helpful.

Are there any alternatives?

Other ways of treating neuropathic pain include:

- Physiotherapy
- Psychological coping techniques
- Some medications

Often we will suggest using a combination of these approaches alongside a nerve block to give a longer lasting effect.

Will my child have an anaesthetic for the nerve block injection?

As the nerve block involves an injection into or near the painful area, we tend to advise children to have a general anaesthetic to make sure they do not feel anything during the injection.

Your child will need to fast (stop eating and drinking) for a few hours before the anaesthetic – we will let you know fasting times the evening beforehand.

Some older children may prefer to have the injections using local anaesthetic cream where the injection will happen and breathing in Entonox® (a mixture of oxygen and nitrous oxide sometimes called ‘gas and air’) through a mask or mouthpiece. It works very quickly to give pain relief and also a feeling of relaxation. Your child will not need to fast before using Entonox® but we recommend not eating or drinking for an hour beforehand and avoiding heavy meals earlier in the day.

What happens before the nerve block injection?

You will have received information about how to prepare your child for the injection in your admission letter. Your child should take their usual medicines as normal on the morning of admission. Please bring all your child's medicines with you when you come to GOSH. Your child will be checked by a nurse to make sure they are well enough for the injection.

The doctors will explain the procedure to you in detail and they will ask you to give permission for the injection by signing a consent form. This will either already have been discussed before your child is admitted, or when your child's doctors see you when you arrive on the ward. If your child has any medical problems, including allergies, please tell the doctor.

The person bringing your child to for the injections should have 'Parental Responsibility' for them. Parental Responsibility refers to the individual who has legal rights, responsibilities, duties, power and authority to make decisions for a child. If the person bringing your child does not have Parental Responsibility, we may have to cancel the injections.

An anaesthetist will see you to talk about the general anaesthetic if your child is due to have one.

What does the nerve block injection involve?

- If your child is having a **general anaesthetic** for the nerve block injection, it will take place in the operating theatre. You will be able to stay with your child until they are under anaesthetic but will then need to go elsewhere to wait until they have recovered.
- If your child is having **Entonox®** for the nerve block injection, it will take place on the ward

and you can be with your child during the procedure.

The doctor will clean your child's skin over the injection site and then insert a small needle through which the local anaesthetic and corticosteroid are then injected. As soon as the injection has been given, they will remove the needle and put a sticky plaster over the injection site.

Are there any risks?

It is uncommon for children to have any problems following the injection as it is regarded as a fairly minor procedure; however, no procedure is risk-free. Risks of having a nerve block injection include:

- **Accidental injury to a blood vessel causing bleeding** – this is usually minor so will just need pressure applying to the area for a few minutes.
- **Infection around the injection site** – if this occurs, it can be treated with antibiotics.
- **Numbness lasting more than 48 hours** – most children recover within four to six weeks.
- **Allergic reaction** – where the skin around the injection site becomes red and itchy; this usually improves within a day or so but please tell us if it happens.
- **Small patch of baldness** – this can be about the size of a one pence coin at the site of the injection if it is in a hairy area.

Some risks are very rare but can occur:

- **Permanent nerve damage** – this may mean some loss of feeling or control over the part of the body affected by the nerve block.
- **Change in heart rhythm or a seizure** – this will be treated promptly, usually with an injection of another medicine.

If there are any other risks specific to the type of nerve block injection suggested or due to your

child's underlying medical condition, the doctor will discuss this with you beforehand.

What happens afterwards?

- If your child had a **general anaesthetic**, they will wake up in the recovery room next to the operating theatre. A nurse will call you to be there with your child as they wake up and are comfortable enough to go back to the ward.
- If your child had **Entonox®**, the effects on the body clear within a few minutes. Some children feel a little light-headed or dizzy afterwards so your child should not walk unaided or eat and drink until any dizziness or disorientation has gone. We recommend that children should rest for 30 minutes after the procedure to ensure the effects have completely worn off.

The doctor will come to the ward to see your child after the injection. The ward nurses will review your child regularly to decide when they have recovered enough for you to take them home. This is usually within a few hours of the injection.

Going home

Your child's skin around the injection site may feel sore and bruised for the first few days. If it is very uncomfortable, they can take pain relief such as paracetamol, according to the instructions on the bottle.

The area near the injection will feel numb, tingly, heavy and weak for a few days so your child should protect the area to avoid knocks and avoid

direct heat or cold (radiators or cold packs for instance) to the area.

- If the nerve block was injected into their arm, it may be helpful to rest it on a pillow or wear a sling.
- If it was injected into their leg, they may need help to move about safely.

It is just as important that your child moves position regularly so they do not put too much pressure on the numb area.

The initial effects can last from two hours up to two days, depending on the area injected and the medicines used. Usually the weak feeling wears off first, followed by a reduction in tingling and heaviness.

You should call your family doctor (GP) if:

- The area injected looks red, swollen or feels hotter than usual
- The area is oozing
- Your child is in a lot of pain and pain relief does not seem to help
- Your child has a temperature of 38°C or higher

What happens next?

Your child may not feel the full effects of the nerve block for four to six weeks. There is a chance that it might not work at all or only work a little. If your child feels some benefit from the injection, we can repeat the injection but usually wait for at least three months before the next one. Your pain nurse will call you after the injection to see how your child is doing.

If you have any questions, please call the Pain Control Service on 020 7405 9200 extension 5940.

Having a nerve block



You have nerves all through your body. They send messages to your brain about pain. Sometimes, nerves send pain messages even though there is nothing wrong.



A nerve block gets in the way of these pain messages. This means you feel less pain.



A nerve block is used with other ways of helping pain. You might have physio or talk to someone about ways of dealing with pain.



Some people have the injection under anaesthetic. This means you will not feel anything or know what is happening.



You can have gas and air instead. It works very quickly to take away your pain. It also makes you feel relaxed.



The doctor will give you an injection of medicine into the sore area.



The nurses will check that you are getting better. The doctor will also come to see you.



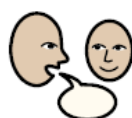
You will be able to go home when you have had something to eat and drink.



You might feel a bit wobbly or dizzy for a few days afterwards. This will get better slowly.



It can take up to 6 weeks to know the nerve block is working.



Your pain nurse will call you to ask how you are feeling.