PATIENT INFORMATION

Nerve Block

What to expect if you're offered a single-shot nerve block for pain relief after your operation

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ABOUT YOUR PROCEDURE

Your nerve block

You have an upcoming operation. As part of your pain relief, your Anaesthetist may offer you a **nerve block**.

This involves a numbing injection being given near the nerves that supply the part of your body being operated on (for example your arm, leg, shoulder, or abdomen). This is a single injection, with no tube left behind, and the numbness typically lasts **12 to 24 hours**.

Some Anaesthetists may perform the nerve block with you awake or lightly sedated. It takes about 5 minutes and is well tolerated. Some anaesthetists may do it once you are under general anaesthesia.

>95%

of patients would choose to have it again

RISKS AND SIDE EFFECTS

What can go wrong

1. **Block failure.** It is rare for the injection not to work, but this happens in a small proportion of blocks. This would mean that more oral pain relief is required. If it happens while still in hospital, the anaesthetist or pain nurses will discuss the options with you.

2. **Effects on nearby nerves.** Depending on where your block is being done, the local anaesthetic can occasionally spread to nearby nerves and cause temporary side effects. For example, blocks near the neck (used for shoulder or arm surgery) can cause a numb or droopy eyelid on one side of the face (called Horner's Syndrome), a hoarse voice, or a feeling of shortness of breath from a temporarily numb breathing nerve. These are not dangerous and settle as the block wears off. Your anaesthetist will let you know if this is a possibility for your particular block.

3. **Nerve damage (rare, approximately 1 in 5,000).** Some temporary numbness, tingling, weakness or pain beyond the expected duration of the block is uncommon but not rare. This happens in around 1 in 100 people. Most of these settle within a few weeks, and almost all resolve within three months. Permanent nerve injury is rare, estimated at 1 in every 5,000 blocks. This can be caused by the needle directly, by bleeding around the nerve, or very rarely by irritation from the local anaesthetic, infection or an immune response.

WHAT TO EXPECT

While the block is working

- Numbness (like pins and needles), and often weakness, in the area of your operation while the block is working.
- Your anaesthetist or nursing team will advise you on protecting the numb area (for example using a sling after an arm block, or being careful with weight-bearing after a leg block).
- It is possible to hurt or burn the numb area without knowing, so you will need to avoid hot surfaces, hot water bottles and similar.
- You will need to start taking regular oral pain relief once the block begins to wear off, usually within 12–24 hours.
- Some people find the numb feeling to be annoying. However, most find it much better than being in pain.

Overall, nerve blocks are very safe and provide excellent pain relief in the first day after surgery, meaning you won't need a lot of morphine-like medicines while the block is working. Because the numbness wears off after 12–24 hours, you will need to plan to have regular oral pain relief ready at home for when this happens.

YOUR OPTIONS

Alternative pain relief options

Nerve catheter
Similar to the above, but a small plastic tube is left near the nerves so that local anaesthetic can keep being given for several days, often 3 to 5. This gives longer lasting numbness and pain relief, but carries some additional risks related to having the catheter in place.

Oral pain relief medications only (no nerve block)
This would completely avoid any of the above risks. However, for many operations the pain can be significant and difficult to manage without a nerve block. There are common and unpleasant side effects to morphine-type painkillers like sedation, constipation, and nausea, but the main concern is the inferior pain relief achieved with this option.

Emergency care

After some nerve blocks, feeling mildly short of breath can be normal (see above). If you feel unwell, go to the emergency department or call an ambulance.

If you have ongoing weakness, numbness or unusual pain more than 48 hours after your block, you should contact the hospital.

Your anaesthetist will discuss these options further with you before your operation.

Authors: Dr Sam Schriek & Dr Jenny Ross, Consultant Anaesthetists, Wellington. This leaflet is our own work, created for patient education. We have not received payment from Te Whatu Ora or any other organisation for this content.

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