



PERIPHERAL NERVE BLOCKS

What are nerve blocks for headache?

- A nerve block is the injection of medication onto or near nerves
 - Administered by a small needle attached to a syringe containing medication to decrease or stop passage of nerve impulses that may carry pain signals to the brain or spinal cord
- Nerve blocks are used to treat pain when drugs or other treatments do not control pain or are not tolerated because of side effects
- Nerve blocks are often effective for many headache conditions, including migraine and cluster headache
- Most nerve blocks for headaches are performed in the back of the head over the occipital bone and nerve, but any nerve on the scalp can be injected
- The medications injected include a local anesthetic and sometimes a steroid
 - You may have even had a nerve block without knowing it: dentists commonly use nerve-blocking agents to numb your mouth during potentially painful procedures.

Who should receive nerve blocks?

- Nerve blocks are most commonly performed for patients who have a headache attack that will not stop even after using prescribed or over the counter medications
- Patients with migraine who have a headache attack that will not stop after 3 straight days (called "status migrainosus") may benefit
- Patients with cluster headache experiencing frequent and severe attacks
- Nerve blocks may also be offered to patients with chronic migraine suffering from frequent, severe, or continuous headache

How are nerve blocks performed?

- Nerve blocks for headache most often take place in the office setting and usually take only minutes to perform
 - The patient may be seated or lying down, usually without any sedation
 - The injection itself will be administered with a syringe attached to a needle much like one that would be used for a routine vaccination

- More than one injection may be required
 - depending on how many areas of pain you have
 - how large an area needs to be covered
 - the type of headache disorder that is being treated
- When finished, you will be allowed to rest for several minutes to let the medication take effect and to make sure no serious side effects develop

How do nerve blocks work?

The medication delivered by the injection will be placed as close to the nerve in the area of the pain as possible. It will then "shut down" the pain receptors within the nerve causing the problem. If steroid is used, it reduces the inflammation and swelling of tissue around the nerves, which may help reduce pain. However, nerve blocks do not work for headache just by a numbing effect on the scalp. They likely have secondary effects on the head pain pathway in the brain that far outlast the duration of numbing the blocked nerves.

Are nerve blocks safe?

Complications of nerve blocks for headache are very rare and almost never serious. However, as with any procedure there are risks, side effects and possibility of complications. The most common side effect is temporary pain at the injection site, which is usually an uncomfortable pressure-like sensation on the back of the head and a burning sensation when injections are administered on the sides or front of the head. The feeling of numbness in the scalp area around the injected nerve is almost universal, but usually disappears after several hours. A small amount of bleeding may occur but usually does not last for a long time, and if it occurs the physician would hold a gauze pad over the area until the bleeding stops. A feeling of light-headedness occurs in a small percentage of patients but also should disappear within minutes.

Steroids are not used as commonly for nerve blocks, with the exception of cluster headache, where the evidence is strongest supporting their use. Local steroid injections at high or repeated doses may cause a loss of hair or fatty tissue at the injection site.

What can I expect after receiving nerve blocks?

Immediately after the injection, you may feel that your pain disappears or is quite less. The duration of such improvement is difficult to predict. Some patients may not benefit at all, while others may experience definitive improvement or disappearance of their headaches for weeks. From the local injections themselves you may have a sore head for a day or two. This is due to the mechanical process of needle insertion as well as initial irritation from the steroid itself.

Summary

Nerve blocks are a safe and simple procedure that can be performed in the office. If you have severe headaches, your doctor can advise you as to whether or not this treatment is appropriate for you.