

Greater Occipital Nerve Block and Rhizotomy

A guide for patients

What is the greater occipital nerve?

The greater occipital nerve is a spinal nerve originating from the 2nd cervical level. There are two greater occipital nerves (left and right). It innervates the back of the head and spreads up the scalp. Pain here commonly causes cervicogenic headaches and more specifically, an occipital neuralgia.



When is a greater occipital nerve rhizotomy indicated?

When there is pain experienced in the distribution of the greater occipital nerve, that is, in the posterior part of the scalp. This can be determined from the history if you describe pain that fits the correct area, as well as by examination if the nerve is painful to touch. This can be on one side only (unilateral) or both sides (bilateral).

If we believe this is the cause of your pain, then we can freeze the nerve (cryorhizotomy) or pulse it with radiofrequency waves (pulsed radiofrequency ablation) to stop the pain signal from travelling to your brain.

Before the Procedure

You will need to fast before the procedure.

This means:

- No food 6 hours before
- No liquids (other than water) 6 hours before (this includes coffee, tea, orange juice etc)

You can drink water up to 2 hours before the procedure. Take your usual medications with a small sip of water. Please contact us if you are taking any blood thinning medications, diabetes medication, pregnant, or unwell.

The Procedure

The procedure itself takes 15-30 minutes.

It is a day case, meaning no overnight stay is required. An Anaesthetist will provide sedation and monitor you during the procedure.

The procedure is performed in the operating room with fluoroscopy (X-ray) to ensure accurate needle placement. Specialized equipment including the radiofrequency needle, probe and radiofrequency machine is used to heat the needle to a temperature of 42 degrees.

The nerve is pulsed with radiofrequency waves and local anaesthetic with steroid is injected following the nerve ablation.

The local anaesthetic provides immediate pain relief, whereas the pulsed radiofrequency and steroid may take several weeks to provide sustained pain relief.

Pain relief usually lasts between 6-12 months. The procedure can be repeated if your pain returns.

After the Procedure

- You will be taken to recovery and monitored until you are ready for discharge.
- You will not be able to drive, so ensure someone can drive you home safely.
- Some patients may experience an initial increase in pain, which is common after a rhizotomy. We may prescribe some additional painkillers to cover you for this.
- Avoid over-exerting yourself immediately after the procedure.
- You may gradually return to your day-to-day activities.

If you develop any symptoms (fever, swelling, worsening weakness or numbness, bleeding, loss of bowel or bladder control) after the procedure or have any other concerns, please contact us, your GP, or your local Emergency Dept.



You will be reviewed by our pain nurse via telephone a few days after the procedure.

What are the risks?

No procedure is risk-free but the risks for this procedure are considered to be relatively low.

Possible risks include infection, bruising, haematoma, nerve injury and allergic reactions.

Infection is minimized with appropriate sterile and aseptic precautions.

Bleeding risk is minimized by stopping blood-thinning medications a few days prior. If this applies to you, our pain nurse will remind you to stop your blood-thinning medications a few days prior to your procedure.

Risk of nerve injury is minimized as we use fluoroscopy to guide accurate needle placement.

Severe allergic reactions to the injectates (ie local anaesthetic, steroids) are very uncommon.

Steroids may produce side effects including stomach irritation, insomnia, mood swings, flushing, palpitations. Post-procedural flare is common after a rhizotomy and can be treated with painkillers.

Radiofrequency treatment can produce patchy numbness on the overlying skin.

Patients need to be aware that the outcome of the procedure is variable between individuals and they may not receive the desired benefits. The therapeutic benefits of the procedure are transient, and repeat injections may be required.

A: Suite 14, Level 1, Murdoch Medical Clinic, SJOG Murdoch Hospital, 100 Murdoch Drive, MURDOCH 6150
T: 08 6317 9627
F: 08 6323 1888 (enter all 10 digits)
E: admin@wpain.com.au
W: www.wpain.com.au