



CLINICAL GUIDELINES

CMM-402: Greater Occipital Nerve Injections and Ablation Guidelines

Effective February 25, 2026

VERSION 1.1.2025

EviCore
By **EVERNORTH**

EviCore healthcare Clinical Decision Support Tool Diagnostic Strategies: This tool addresses common symptoms and symptom complexes. Requests for individuals with atypical symptoms or clinical presentations that are not specifically addressed will require physician review. Consultation with the referring physician, specialist and/or individual's Primary Care Physician (PCP) may provide additional insight.

EviCore's Clinical Review Criteria (CRC) and related content is made available for the limited uses of: reference; and individual use, only limited to facilitating the determination of medically necessary and appropriate clinical treatment by clinicians for specific delegated patients under their care. The CRC and related content is proprietary information of EviCore, and copyrighted to the full extent of the law. Except as expressly permitted, you may not modify, copy, reproduce, republish, upload, post, transmit, hyperlink to or from, or distribute in any way the CRC, nor may you sell, transfer, distribute, assign, lease, reproduce, or otherwise use the CRC in commerce, in a manner that competes with us or infringes upon our rights, or for any public or commercial endeavor without our prior and express written consent.

CPT® (Current Procedural Terminology) is a registered trademark of the American Medical Association (AMA). CPT® five digit codes, nomenclature and other data are copyright 2025 American Medical Association. All Rights Reserved. No fee schedules, basic units, relative values or related listings are included in the CPT® book. AMA does not directly or indirectly practice medicine or dispense medical services. AMA assumes no liability for the data contained herein or not contained herein.

©2025 EVICORE HEALTHCARE. ALL RIGHTS RESERVED

CMM-402: Greater Occipital Nerve Injections and Ablation

Definitions**General Guidelines****Indications****Non-Indications****Codes (CMM-402)****References (CMM-402)**

Definitions

- **Behavioral Yellow Flags:** an active or history of substance abuse, depression, dissatisfaction with work, job disability, or anxiety diagnosis.
- **Clinically Meaningful Improvement:** a global assessment showing at least 50% improvement, or pain relief with a two (2) point drop in VAS pain scale (where 10 is the worst pain imaginable and 0 is no pain at all).
- **Greater Occipital Nerve (GON):** nerve that arises from the medial division of the dorsal ramus of the C2 spinal nerve. It runs backward between the C1 and C2 vertebrae and traverses between the inferior capitis oblique and semispinalis capitis muscles from underneath the suboccipital triangle. The GON innervates the skin of the back of the scalp up to the vertex of the skull, the ear, and the skin just above the parotid gland.
- **Greater Occipital Nerve Ablation:** Radiofrequency ablation involves the insertion of a radiofrequency probe towards the greater occipital nerve. The radiofrequency electrode is then utilized to create a heat lesion by coagulating the greater occipital nerve.
- **Greater Occipital Nerve Block (GONB):** an injection of a small dose of local anesthetic and/or steroid around the greater occipital nerve. The injections may be given unilateral or bilateral. The GONB block aims to help by reducing the level of pain for a period of time.
- **Occipital Neuralgia:** a distinct type of headache characterized by piercing, throbbing, or electric-shock-like chronic pain in the upper neck, back of the head, and behind the ears, usually on one side of the head. Typically, the pain of occipital neuralgia begins in the neck and then spreads upwards. Some individuals will also experience pain in the scalp, forehead, and behind the eyes. Their scalp may also be tender to the touch, and their eyes especially sensitive to light. The location of pain is related to the areas supplied by the greater and lesser occipital nerves, which run from the area where the spinal column meets the neck, up to the scalp at the back of the head. The pain is caused by irritation or injury to the nerves, which can be the result of trauma to the back of the head, pinching of the nerves by overly tight neck muscles, compression of the nerve as it leaves the spine due to osteoarthritis, or tumors or other types of lesions in the neck.
 - ◆ A positive response (relief from pain) after an anesthetic and/or steroid nerve block will confirm the diagnosis.
- **Red Flags:** comorbidities that require urgent/emergent diagnostic imaging and/or referral for definitive diagnosis and treatment.

General Guidelines

Application of Guideline

- In regards to greater occipital nerve blocks, this guideline only applies to greater occipital nerve blocks used to treat occipital neuralgia and not to other techniques

used to treat occipital neuralgia nor to other conditions treated by greater occipital nerve blocks.

Injectates

- In regards to injectates used for greater occipital nerve blocks, this guideline only applies to injections of anesthetic and/or steroid and does not apply to injections of biologics (e.g., platelet rich plasma, stem cells, amniotic fluid, etc.) and/or any other injectates that are not in scope of management.

Frequency & Number of Injections/Procedures

- Only one invasive interventional spinal modality or procedure will be performed on the same date of service.
- When criteria in the **Indications** section is met, up to six (6) greater occipital nerve blocks total (whether unilateral or bilateral) are permitted in 12 months
- At least four (4) week duration is required between the last occipital nerve block, cervical trigger point injection, or cervical facet injection/medial branch block

Indications

Initial Greater Occipital Nerve Block

The initial greater occipital nerve block for occipital neuralgia is considered **medically necessary** when **ALL** of the following criteria have been met:

- Clinical findings and/or imaging studies suggest no other obvious cause of the headache
- A comprehensive headache evaluation must be performed with consideration of alternative causes such as **ANY** of the following:
 - ◆ Exertional headache
 - ◆ Migraine with or without aura
 - ◆ Medication overuse headache
- Diagnosis of occipital neuralgia as evidenced by **BOTH** of the following:
 - ◆ Paroxysmal stabbing pain, (with or without aching between attacks), in the distribution of the greater occipital nerve
 - ◆ Tenderness over the affected nerve

Second and Subsequent Greater Occipital Nerve Block(s)

The second and subsequent greater occipital nerve block(s) for recurrent occipital neuralgia are considered **medically necessary** when **ALL** of the following criteria have been met:

- Clinical findings and/or imaging studies suggest no other obvious cause of the headache

- A comprehensive headache evaluation must be performed with consideration of alternative causes such as **ANY** of the following:
 - ◆ Exertional headache
 - ◆ Migraine with or without aura
 - ◆ Medication overuse headache
- Clinically meaningful improvement after each injection (including the initial injection)
- The greater occipital nerve block (GONB) must be combined with a self-care program.
 - ◆ A self-care program may include **ANY** of the following:
 - Anti-inflammatory medications
 - Muscle relaxants
 - Rest
 - Massage
 - Heat
- Confirmed diagnosis of **recurrent** occipital neuralgia as evidenced by tenderness to palpation over the greater occipital nerve
- Evidence of **BOTH** of the following for individuals with chronic pain where there has been continuous opiate usage for three (3) months or longer:
 - ◆ Co-management of behavioral health and medical conditions
 - ◆ A plan to address potential opiate overuse or abuse

Non-Indications

Greater Occipital Nerve Blocks

- Greater occipital nerve blocks performed without meeting the criteria listed in the **Definitions**, the **General Guidelines**, and the **Indications** sections are considered **not medically necessary**.
- Use of an injectate other than anesthetic and/or steroid is considered **not medically necessary**.

Occipital Nerve Ablation

- Occipital nerve ablation by any method is considered **not medically necessary**.

Codes (CMM-402)

The inclusion of any code in this table does not imply that the code is under management or requires prior authorization. Refer to the applicable health plan for management details. Prior authorization of a code listed in this table is not a guarantee of payment. The Certificate of Coverage or Evidence of Coverage policy outlines the terms and conditions of the member's health insurance policy.

Code	Code Description/Definition
64405	Injection(s), anesthetic agent(s) and/or steroid; greater occipital nerve
64640	Destruction by neurolytic agent, other peripheral nerve or branch

References (CMM-402)

1. Lennard T, Shin D. Shoulder and Chest Wall Bocks. In: Lennard T, ed. *Pain Procedures in Clinical Practice*. 2nd ed. Hanley & Belfus. 2000:94-95.
2. Silberstein S. Evaluation of the Headache Patient. In: Silberstein S, ed. *Clinician's Manual on Migraine*. 2nd ed Philadelphia, PA. Current Medicine, Inc. 2002:9.
3. Balmaceda C, Rossi J. Detecting Potentially Life-Threatening Headache Syndromes. *J Crit Illn*. 2003;18:23-30.
4. Peters KS. Secondary headache and head pain emergencies. *Prim Care*. 2004;31(2):381-vii. doi:10.1016/j.pop.2004.02.009.
5. Ashkenazi A, Matro R, Shaw JW, Abbas MA, Silberstein SD. Greater occipital nerve block using local anaesthetics alone or with triamcinolone for transformed migraine: a randomised comparative study. *J Neurol Neurosurg Psychiatry*. 2008;79(4):415-417. doi:10.1136/jnnp.2007.124420.
6. Krymchantowski AV, Silva M T, Barbosa JS, Alves LA. Amitriptyline versus amitriptyline combined with fluoxetine in the preventative treatment of transformed migraine: a double-blind study. *Headache*. 2002;42(6):510-514. doi:10.1046/j.1526-4610.2002.02125.x.
7. Spira PJ, Beran RG; Australian Gabapentin Chronic Daily Headache Group. Gabapentin in the prophylaxis of chronic daily headache: a randomized, placebo-controlled study. *Neurology*. 2003;61(12):1753-1759. doi:10.1212/01.wnl.0000100121.58594.11.
8. Silberstein SD, Lipton RB, Dodick DW, et al. Efficacy and safety of topiramate for the treatment of chronic migraine: a randomized, double-blind, placebo-controlled trial. *Headache*. 2007;47(2):170-180. doi:10.1111/j.1526-4610.2006.00684.x.
9. De Felice M, Porreca F. Opiate-induced persistent pronociceptive trigeminal neural adaptations: potential relevance to opiate-induced medication overuse headache. *Cephalalgia*. 2009;29(12):1277-1284. doi:10.1111/j.1468-2982.2009.01873.x.
10. Ghiotto N, Sances G, Galli F, et al. Medication overuse headache and applicability of the ICHD-II diagnostic criteria: 1-year follow-up study (CARE I protocol). *Cephalalgia*. 2009;29(2):233-243. doi:10.1111/j.1468-2982.2008.01712.x.
11. Pageler L, Savidou I, Limmroth V. Medication-overuse headache. *Curr Pain Headache Rep*. 2005;9(6):430-435. doi:10.1007/s11916-005-0023-6.
12. Lake AE 3rd. Medication overuse headache: biobehavioral issues and solutions. *Headache*. 2006;46(Suppl 3):S88-S97. doi:10.1111/j.1526-4610.2006.00560.x.
13. Dubois MY, Livovich J, Fletwood J, Joranson DE, Vaillancourt PD. Incompetence, drug diversion or pain management? Trying to draw the line. *Pain Med*. 2002;3(1):73-77. doi:10.1046/j.1526-4637.2002.02006.1.x.
14. Fishbain DA, Cutler RB, Rosomoff HL, Rosomoff RS. Is there a relationship between nonorganic physical findings (Waddell signs) and secondary gain/malingering? *Clin J Pain*. 2004;20(6):399-408. doi:10.1097/00002508-200411000-00004.
15. Giordano J, Schatman ME. A crisis in chronic pain care: an ethical analysis. Part three: Toward an integrative, multi-disciplinary pain medicine built around the needs of the patient. *Pain Physician*. 2008;11(6):775-784.
16. The Migraine Trust. *Greater Occipital Nerve (GON) block injections- Injections into the head to prevent migraine*. 2021. © The Migraine Trust. Available at: <https://migrainetrust.org/live-with-migraine/healthcare/treatments/greater-occipital-nerve-gon-block-injections/#page-section-1>.
17. Juškys R, Štustickas G. Effectiveness of treatment of occipital neuralgia using the nerve block technique: a prospective analysis of 44 patients. *Acta Med Lit*. 2018;25(2):53-60. doi: 10.6001/actamedica.v25i2.3757.
18. Kahan M, Srivastava A, Wilson L, Gourlay D, Midmer D. Misuse of and dependence on opioids: study of chronic pain patients. *Can Fam Physician*. 2006;52(9):1081-1087.
19. Tacci JA, Webster BS, Hashemi L, Christiani DC. Healthcare utilization and referral patterns in the initial management of new-onset, uncomplicated, low back workers' compensation disability claims. *J Occup Environ Med*. 1998;40(11):958-963. doi:10.1097/00043764-199811000-00004.
20. Ferrari A, Leone S, Tacchi R, et al. The link between pain patient and analgesic medication is greater in migraine than in rheumatic disease patients. *Cephalalgia*. 2009;29(1):31-37. doi:10.1111/j.1468-2982.2008.01697.x.
21. Bovim G, Fredriksen TA, Stolt-Nielsen A, Sjaastad O. Neurolysis of the greater occipital nerve in cervicogenic headache. A follow up study. *Headache*. 1992;32(4):175-179. doi:10.1111/j.1526-4610.1992.hed3204175.x.
22. Gille O, Lavignolle B, Vital JM. Surgical treatment of greater occipital neuralgia by neurolysis of the greater occipital nerve and sectioning of the inferior oblique muscle. *Spine (Phila Pa 1976)*. 2004;29(7):828-832. doi:10.1097/01.brs.0000112069.37836.2e.
23. National Institutes of Health (NIH):National Institute of Neurological Disorders and Stroke. *Occipital Neuralgia*. Last Reviewed July 19, 2024. Available at: <https://www.ninds.nih.gov/health-information/disorders/occipital-neuralgia#:~:text=Publications-,Definition,neck%20and%20then%20spreads%20upwards>.