

Occipital Nerve Ablation

MEDICAL POLICY NUMBER: 155

Effective Date: 9/1/2022	COVERAGE CRITERIA	2
Last Review Date: 6/2022	POLICY CROSS REFERENCES.....	2
Next Annual Review: 6/2023	POLICY GUIDELINES.....	2
	REGULATORY STATUS.....	4
	CLINICAL EVIDENCE AND LITERATURE REVIEW	4
	BILLING GUIDELINES AND CODING	4
	REFERENCES.....	5
	POLICY REVISION HISTORY.....	5

INSTRUCTIONS FOR USE: Company Medical Policies serve as guidance for the administration of plan benefits. Medical policies do not constitute medical advice nor a guarantee of coverage. Company Medical Policies are reviewed annually and are based upon published, peer-reviewed scientific evidence and evidence-based clinical practice guidelines that are available as of the last policy update. The Company reserves the right to determine the application of medical policies and make revisions to medical policies at any time. The scope and availability of all plan benefits are determined in accordance with the applicable coverage agreement. Any conflict or variance between the terms of the coverage agreement and Company Medical Policy will be resolved in favor of the coverage agreement. Coverage decisions are made on the basis of individualized determinations of medical necessity and the experimental or investigational character of the treatment in the individual case. In cases where medical necessity is not established by policy for specific treatment modalities, evidence not previously considered regarding the efficacy of the modality that is presented shall be given consideration to determine if the policy represents current standards of care.

SCOPE: Providence Health Plan, Providence Health Assurance, Providence Plan Partners, and Ayin Health Solutions as applicable (referred to individually as “Company” and collectively as “Companies”).

PLAN PRODUCT AND BENEFIT APPLICATION

☒ Commercial

☒ Medicaid/OHP*

☐ Medicare**

*Medicaid/OHP Members

Oregon: Services requested for Oregon Health Plan (OHP) members follow the OHP Prioritized List and Oregon Administrative Rules (OARs) as the primary resource for coverage determinations. Medical policy criteria below may be applied when there are no criteria available in the OARs and the OHP Prioritized List.

**Medicare Members

This Company policy may be applied to Medicare Plan members only when directed by a separate Medicare policy. Note that investigational services are considered “**not medically necessary**” for Medicare members.

COVERAGE CRITERIA

Note: For Medicare members, please see the Medical Policy: “Back: Facet Joint Interventions for Pain Management (Medicare Only)” for ablation procedures of the occipital nerve.

- I. Ablation (e.g. cryoablation, pulsed radiofrequency ablation) of the occipital nerve (Greater, Lesser or Third) is considered **investigational and is not covered** for all indications, including but not limited to occipital neuralgia, cluster headaches or refractory migraine headache.

Link to [Evidence Summary](#)

POLICY CROSS REFERENCES

- [Back: Ablative Procedures to Treat Back and Neck Pain](#), MP21

The full Company portfolio of current Medical Policies is available online and can be [accessed here](#).

POLICY GUIDELINES

BACKGROUND

Occipital Nerves

The occipital nerves are a group of nerves that arise from the C2 and C3 spinal nerves, innervating the posterior scalp up as far as the vertex. There are three major occipital nerves in the human body: the greater occipital nerve, the lesser (or small) occipital nerve, and the third (or least) occipital nerve.¹

Cluster Headache

According to ECRI, “cluster headaches are a primary neurovascular disorder that patients experience as severe to very severe, one-sided head pain. Chronic CHs typically occur every other day, daily, or even several times daily with pain lasting from 15 minutes to a few hours.”²

Migraine Headache

Migraine headache is defined as recurring headache attacks lasting 4 to 72 hours. “Typical characteristics of the headache are unilateral location, pulsating quality, moderate-to-severe intensity, aggravated by routine physical activity, associated with nausea, and/or photophobia and phonophobia.” Migraines can also include an aura or perceptual disturbance. Common treatments of migraines include nonsteroidal anti-inflammatory drugs (NSAIDs), steroids, and triptans (e.g., sumatriptan). Preventative therapies are also available, including calcium channel blockers and corticosteroids.

Occipital Neuralgia

Occipital neuralgia is a rare neurological disorder characterized by piercing, throbbing, or electric-shock-like pain in the upper neck, back of the head, and behind the ears, usually on one side of the head. Commonly, the cause of occipital neuralgia is unknown; however, it can occur due to irritation or injury to the occipital nerve. Therapies for occipital neuralgia may include pain medications, anesthetic injection, and steroids to reduce inflammation and block the transmission of pain signals.

Ablation of the Occipital Nerve

Ablative procedures (e.g. cryoablation, radiofrequency ablation, rhizotomy) are performed in the attempt to denervate the occipital nerve (greater or lesser), upper cervical nerve (eg, second cervical nerve, also known as C2), supraorbital, supratrochlear or sphenopalatine ganglion. The proposed goal of denervation is to disrupt pain signals sent from the nerves to the brain without causing excessive sensory loss, motor dysfunction or other complications.

Occipital Nerve Stimulation (ONS)

ONS involves the implantation of subcutaneous electrodes at the base of the skull over the greater, lesser, or third occipital nerves. The electrodes are connected to leads which are tunneled together in a caudal direction to an impulse generator implanted in the chest wall, low back, buttocks, or abdomen. The generators can be controlled by the physician or patient and can provide continuous or intermittent stimulation. Additionally, the generators can be non-rechargeable with a 2 to 5 year lifespan or rechargeable.

REGULATORY STATUS

U.S. FOOD AND DRUG ADMINISTRATION (FDA)

Approval or clearance by the Food and Drug Administration (FDA) does not in itself establish medical necessity or serve as a basis for coverage. Therefore, this section is provided for informational purposes only.

CLINICAL EVIDENCE AND LITERATURE REVIEW

EVIDENCE REVIEW

Ablation of the Occipital Nerve

Several systematic reviews investigating the use of radiofrequency ablation (RFA) and pulsed radiofrequency ablation (PRFA) for the management of cervicogenic headache (CHA) were identified.³⁻⁵ While numerous studies demonstrated benefit, investigators from each publication concluded that there was a lack of high-quality RCTs and/or strong non-RCTs to support the use of RFA and PRFA in the management of CHA. Limitations included studies' small sample sizes, lack of long-term follow-up, heterogenous treatment parameters, and lack of randomized comparator groups.

CLINICAL PRACTICE GUIDELINES

No clinical practice guidelines addressing ablation of the occipital nerve were identified.

EVIDENCE SUMMARY

There is insufficient evidence to support the safety and efficacy of occipital nerve ablation for refractory migraine headaches or occipital neuralgia. Evidence addressing ablation of the occipital nerve is limited, with no demonstrated clinical utility reported in high-quality studies. Furthermore, no clinical practice guidelines recommend ablation for treating migraines or neuralgia. Therefore, ablation of the occipital nerve is considered investigational.

BILLING GUIDELINES AND CODING

When billed for occipital nerve ablation, the following two codes are considered investigational and are not covered.

CODES*		
CPT	64633	Destruction by neurolytic agent, paravertebral facet joint nerve(s), with imaging guidance (fluoroscopy or CT); cervical or thoracic, single facet joint

	64634	Destruction by neurolytic agent, paravertebral facet joint nerve(s), with imaging guidance (fluoroscopy or CT); cervical or thoracic, each additional facet joint (List separately in addition to code for primary procedure)
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***Coding Notes:**

- The above code list is provided as a courtesy and may not be all-inclusive. Inclusion or omission of a code from this policy neither implies nor guarantees reimbursement or coverage. Some codes may not require routine review for medical necessity, but they are subject to provider contracts, as well as member benefits, eligibility and potential utilization audit.
- All unlisted codes are reviewed for medical necessity, correct coding, and pricing at the claim level. If an unlisted code is submitted for non-covered services addressed in this policy then it will be **denied as not covered**. If an unlisted code is submitted for potentially covered services addressed in this policy, to avoid post-service denial, **prior authorization is recommended**.
- See the non-covered and prior authorization lists on the Company [Medical Policy, Reimbursement Policy, Pharmacy Policy and Provider Information website](#) for additional information.
- HCPCS/CPT code(s) may be subject to National Correct Coding Initiative (NCCI) procedure-to-procedure (PTP) bundling edits and daily maximum edits known as “medically unlikely edits” (MUEs) published by the Centers for Medicare and Medicaid Services (CMS). This policy does not take precedence over NCCI edits or MUEs. Please refer to the CMS website for coding guidelines and applicable code combinations.

REFERENCES

1. Yu M WS. Anatomy, Head and Neck, Occipital Nerves. <https://www.ncbi.nlm.nih.gov/books/NBK542213/>. Published 2020. Updated 11/12/2020. Accessed 1/10/2022.
2. ECRI Institute. Occipital Nerve Stimulation for Treating Medically Refractory Chronic Cluster Headache. <https://www.ecri.org/components/Hotline/Pages/27532.aspx>. Published 2019. Accessed 1/9/2022.
3. Grandhi RK, Kaye AD, Abd-Elseyed A. Systematic review of radiofrequency ablation and pulsed radiofrequency for management of cervicogenic headaches. *Current Pain and Headache Reports*. 2018;22(3):18
4. Orhurhu V, Huang L, Quispe RC, et al. Use of Radiofrequency Ablation for the Management of Headache: A Systematic Review. *Pain Physician*. 2021;24(7):E973-e987
5. Goyal S, Kumar A, Mishra P, Goyal D. Efficacy of interventional treatment strategies in the management of patients with cervicogenic headache- A systematic review. *Korean J Anesthesiol*. 2021

POLICY REVISION HISTORY

DATE	REVISION SUMMARY
2/2023	Converted to new policy template.