

Medical Coverage Policy | Occipital Nerve Stimulation - Insertion



EFFECTIVE DATE: 06|01|2015
POLICY LAST UPDATED: 07|20|2022

OVERVIEW

Occipital nerve stimulation (ONS) delivers a small electrical charge to the occipital nerve in an attempt to treat migraines and other headaches in patients who have not responded to medications. This policy is intended to document the insertion or implantation of the device as not medically necessary.

MEDICAL CRITERIA

Not applicable

PRIOR AUTHORIZATION

Not applicable

POLICY STATEMENT

Medicare Advantage Plans

Occipital nerve stimulation is not covered as the evidence is insufficient to determine the effects of the technology on health outcomes.

Revision or replacement of an occipital nerve stimulator is not covered as the initial implantation procedure is also not covered.

Commercial Products

Occipital nerve stimulation is considered not medically necessary as the evidence is insufficient to determine the effects of the technology on health outcomes.

Revision or replacement of an occipital nerve stimulator is considered not medically necessary as the initial implantation procedure is also not medically necessary.

COVERAGE

Benefits may vary between groups and contracts. Please refer to the appropriate Benefit Booklet, Evidence of Coverage or Subscriber Agreement for not covered/not medically necessary benefits/coverage.

BACKGROUND

The ONS device consists of a subcutaneously implanted pulse generator (in the chest wall or abdomen) attached to extension leads that are tunneled to join electrodes placed across one or both occipital nerves at the base of the skull. Continuous or intermittent stimulation may be used.

The U.S. Food and Drug Administration (FDA) has not cleared any occipital nerve stimulation device for treatment of headache.

For individuals who have migraine headaches refractory to preventive medical management, and individuals who have non-migraine headaches (eg, hemicrania continua, cluster headaches) who receive occipital nerve stimulation, the evidence is insufficient to determine the effects of the technology on health outcomes. Therefore, the service is considered not medically necessary.

CODING

Medicare Advantage Plans and Commercial Products

There is no specific CPT or HCPCS code(s) for occipital nerve stimulation, therefore providers should report this service with an unlisted procedure code.

64999 Unlisted procedure, nervous system

RELATED POLICIES

Not applicable.

PUBLISHED

Provider Update September 2022

Provider Update, February 2022

Provider Update, July 2020

Provider Update, December 2019

Provider Update, April 2018

REFERENCES

1. Chen YF, Bramley G, Unwin G, et al. Occipital nerve stimulation for chronic migraine--a systematic review and meta-analysis. *PLoS One*. Mar 2015;10(3):e0116786. PMID 25793740
2. Yang Y, Song M, Fan Y, et al. Occipital nerve stimulation for migraine: a systematic review. *Pain Pract*. Apr 2016;16(4):509-517. PMID 25865962
3. Saper JR, Dodick DW, Silberstein SD, et al. Occipital nerve stimulation for the treatment of intractable chronic migraine headache: ONSTIM feasibility study. *Cephalalgia*. Feb 2011;31(3):271-285. PMID 20861241
4. Silberstein SD, Dodick DW, Saper J, et al. Safety and efficacy of peripheral nerve stimulation of the occipital nerves for the management of chronic migraine: results from a randomized, multicenter, double-blinded, controlled study. *Cephalalgia*. Dec 2012;32(16):1165-1179. PMID 23034698
5. Dodick DW, Silberstein SD, Reed KL, et al. Safety and efficacy of peripheral nerve stimulation of the occipital nerves for the management of chronic migraine: long-term results from a randomized, multicenter, double- blinded, controlled study. *Cephalalgia*. Apr 2015;35(4):344-358. PMID 25078718
6. Burns B, Watkins L, Goadsby PJ. Treatment of hemicrania continua by occipital nerve stimulation with a bion device: long-term followup of a crossover study. *Lancet Neurol*. Nov 2008;7(11):1001-1012. PMID 18845482
7. Burns B, Watkins L, Goadsby PJ. Treatment of intractable chronic cluster headache by occipital nerve stimulation in 14 patients. *Neurology*. Jan 27 2009;72(4):341-345. PMID 19171831
8. Magis D, Gerardy PY, Remacle JM, et al. Sustained effectiveness of occipital nerve stimulation in drug-resistant chronic cluster headache. *Headache*. Sep 2011;51(8):1191-1201. PMID 21848953
9. Mueller OM, Gaul C, Katsarava Z, et al. Occipital nerve stimulation for the treatment of chronic cluster headache - lessons learned from 18 months experience. *Cen Eur Neurosurg*. May 2011;72(2):84-89. PMID 21448856
10. Fontaine D, Blond S, Lucas C, et al. Occipital nerve stimulation improves the quality of life in medically- intractable chronic cluster headache: Results of an observational prospective study. *Cephalalgia*. Oct 2017;37(12):1173-1179. PMID 27697849
11. Leone M, Proietti Cecchini A, Messina G, et al. Long-term occipital nerve stimulation for drug-resistant chronic cluster headache. *Cephalalgia*. Jul 2017;37(8):756-763. PMID 27250232
12. Miller S, Watkins L, Matharu M. Treatment of intractable chronic cluster headache by occipital nerve stimulation: a cohort of 51 patients. *Eur J Neurol*. Feb 2017;24(2):381-390. PMID 27995704
13. Lepus A, Fontaine D, Donnet A, et al. Long-Term Efficacy of Occipital Nerve Stimulation for Medically Intractable Cluster Headache. *Neurosurgery*. Jan 13 2021; 88(2): 375-383. PMID 32985662
14. Vadivelu S, Bolognese P, Milhorat TH, et al. Occipital nerve stimulation for refractory headache in the Chiari malformation population. *Neurosurgery*. Jun 2012;70(6):1430-1436; discussion 1436-1437. PMID 22418582

15. Sweet JA, Mitchell LS, Narouze S, et al. Occipital nerve stimulation for the treatment of patients with medically refractory occipital neuralgia: Congress of Neurological Surgeons Systematic Review and Evidence-Based Guideline. Neurosurgery. Sep 2015;77(3):332-341. PMID 26125672
16. National Institute for Health and Care Excellence. Occipital nerve stimulation for intractable chronic migraine [IPG452]. 2013; <https://www.nice.org.uk/guidance/ipg452>. Accessed March 11, 2022.

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