



**BlueCross
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**MEDICAL COVERAGE GUIDELINES
SECTION: SURGERY**

**ORIGINAL EFFECTIVE DATE: 12/07/11
LAST REVIEW DATE: 12/18/13
LAST CRITERIA REVISION DATE: 05/14/13
ARCHIVE DATE:**

OCCIPITAL AND TRIGEMINAL PERIPHERAL NERVE STIMULATION

Coverage for services, procedures, medical devices and drugs are dependent upon benefit eligibility as outlined in the member's specific benefit plan. This Medical Coverage Guideline must be read in its entirety to determine coverage eligibility, if any.

The section identified as "Description" defines or describes a service, procedure, medical device or drug and is in no way intended as a statement of medical necessity and/or coverage.

The section identified as "Criteria" defines criteria to determine whether a service, procedure, medical device or drug is considered medically necessary or experimental or investigational.

State or federal mandates, e.g., FEP program, may dictate that any drug, device or biological product approved by the U.S. Food and Drug Administration (FDA) may not be considered experimental or investigational and thus the drug, device or biological product may be assessed only on the basis of medical necessity.

Medical Coverage Guidelines are subject to change as new information becomes available.

For purposes of this Medical Coverage Guideline, the terms "experimental" and "investigational" are considered to be interchangeable.

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Description:

Peripheral nerve stimulation (PNS) is a technique in which electrodes are placed along the course of peripheral nerves to administer a weak electrical current to control pain.

PNS of the occipital nerve and the trigeminal nerve has been investigated for the treatment of craniofacial pain related to occipital or trigeminal neuralgia and for the treatment of chronic headaches, including migraines.



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Criteria:

For peripheral subcutaneous field stimulation, see BCBSAZ Medical Coverage Guideline, "Peripheral Subcutaneous Field Stimulation".

➤ Occipital and/or trigeminal peripheral nerve stimulation for all indications is considered ***experimental or investigational*** based upon:

1. Insufficient scientific evidence to permit conclusions concerning the effect on health outcomes, and
2. Insufficient evidence to support improvement of the net health outcome.

These indications include, *but are not limited to*:

- Chronic headache
- Craniofacial pain

Resources:

1. 7.01.125 BCBS Association Medical Policy Reference Manual. Occipital Nerve Stimulation. Re-issue date 11/14/2013, issue date 02/11/2010.
2. Abejon D and Krames E. Peripheral Nerve Stimulation or Is It Peripheral Subcutaneous Field Stimulation; what Is in a Moniker? *Neuromodulation: Technology at the Neural Interface*. 2009;12(1):1-4.
3. Ashkenazi A, Young WB. The effects of greater occipital nerve block and trigger point injection on brush allodynia and pain in migraine. *Headache*. 2005 Apr 2005;45(4):350-354.
4. Bari AA, Pouratian N. Brain imaging correlates of peripheral nerve stimulation. *Surg Neurol Int*. 2012;3(Suppl 4):S260-268.



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OCCIPITAL AND TRIGEMINAL PERIPHERAL NERVE STIMULATION (cont.)

Resources: (cont.)

5. Burns B, Watkins L, Goadsby PJ. Treatment of medically intractable cluster headache by occipital nerve stimulation: long-term follow-up of eight patients. *Lancet*. 2007 Mar 31 2007;369(9567):1099-1106.
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12. Jones RL. Occipital Nerve Stimulation Using a Medtronic Res美e II Electrode Array. *Pain Physician*. 2003 Oct 2003;6(4):507-508.
13. Lenchig S, Cohen J, Patin D. A minimally invasive surgical technique for the treatment of posttraumatic trigeminal neuropathic pain with peripheral nerve stimulation. *Pain Physician*. Sep-Oct 2012;15(5):E725-732.
14. Magis D, Allena M, Bolla M, De Pasqua V, Remacle JM, Schoenen J. Occipital nerve stimulation for drug-resistant chronic cluster headache: a prospective pilot study. *Lancet Neurol*. 2007 Apr 2007;6(4):314-321.



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Resources: (cont.)

15. Martelletti P, van Suijlekom H. Cervicogenic headache: practical approaches to therapy. *CNS Drugs*. 2004 2004;18(12):793-805.
16. Mayo Clinic. Occipital Nerve Stimulation found to be safe, effective treatment for chronic headache. 04/05/2006 2006.
17. Medtronic. Medtronic Begins Study of Occipital Nerve Stimulation for Chronic, Refractory Migraine Headaches. 09/28/2004 2004.
18. Nizard J, Raoul S, Nguyen JP, Lefaucheur JP. Invasive stimulation therapies for the treatment of refractory pain. *Discov Med*. Oct 2012;14(77):237-246.
19. Royster EI, Crumbley K. Initial experience with implanted peripheral nerve stimulation for the treatment of refractory cephalgia. *Ochsner J*. Summer 2011;11(2):147-150.
20. Schwedt TJ, Dodick DW, Hentz J, Trentman TL, Zimmerman RS. Occipital nerve stimulation for chronic headache--long-term safety and efficacy. *Cephalgia*. 2007 Feb 2007;27(2):153-157.
21. Schwedt TJ, Dodick DW, Trentman TL, Zimmerman RS. Response to occipital nerve block is not useful in predicting efficacy of occipital nerve stimulation. *Cephalgia*. 2007 Mar 2007;27(3):271-274.
22. Slavin KV, Colpan ME, Munawar N, Wess C, Nersesyan H. Trigeminal and occipital peripheral nerve stimulation for craniofacial pain: a single-institution experience and review of the literature. *Neurosurg Focus*. 2006 2006;21(6):E5.
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Resources: (cont.)

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28. U.S. National Institutes of Health Clinical Trials. Bion for Occipital Nerve Stimulation. Accessed 05/25/2007.
29. U.S. National Institutes of Health Clinical Trials. An Italian Open-Label Study of Occipital Nerve Stimulation in the Treatment of Chronic Migraine Headache. Accessed 05/25/2007.
30. U.S. National Institutes of Health Clinical Trials. Occipital Nerve Stimulation to Treat Chronic Headaches. Accessed 05/25/2007.
31. U.S. National Institutes of Health Clinical Trials. Treatment for Migraines With an Implantable Device. Accessed 05/25/2007.