

Corporate Medical Policy

Occipital Nerve Stimulation

File Name: occipital_nerve_stimulation
Origination: 8/2010
Last CAP Review: 5/2011
Next CAP Review: 5/2012
Last Review: 1/2012

Description of Procedure or Service

Occipital nerve stimulation (ONS) delivers a small electrical charge to the occipital nerve in an attempt to prevent migraines and other headaches in patients who have not responded to medications. The 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.

Implanted peripheral nerve stimulators have been used for treatment of refractory pain for many years but only recently proposed for management of craniofacial pain. Occipital, supraorbital, and infraorbital stimulation have been reported in the literature.

There are four types of headache: vascular, muscle contraction (tension), traction, and inflammatory.

Primary (not the result of another condition) chronic headache is defined as headache occurring more than 15 days of the month for at least 3 months. An estimated 45 million Americans experience chronic headaches. For at least half of these people, the problem is severe and sometimes disabling.

Migraine is the most common type of vascular headache. Migraine headaches are usually characterized by severe pain on one or both sides of the head, an upset stomach, and, at times, disturbed vision. One- year prevalence of migraine ranges from 6%–15% in adult men and from 14%–35% in adult women. Migraine headaches may last a day or more and can strike as often as several times a week or as rarely as once every few years. Drug therapy for migraine is often combined with biofeedback and relaxation training. Sumatriptan is commonly used for relief of symptoms. Drugs used to prevent migraine include methysergide maleate, propranolol hydrochloride, ergotamine tartrate; amitriptyline, valproic acid, and verapamil.

Hemicrania continua, also a vascular headache, causes moderate pain with occasional severe pain on only one side of the head. At least one of the following symptoms must also occur; conjunctival injection and/or lacrimation, nasal congestion and/or rhinorrhea, or ptosis and/or miosis. Headache occurs daily and is continuous with no pain-free periods. Hemicrania continua occurs mainly in woman, and its true prevalence is not known. Indomethacin usually provides rapid relief of symptoms. Other NSAIDs, including ibuprofen, celecoxib, and naproxen, can provide some relief from symptoms. Amitriptyline and other tricyclic antidepressants are effective in some patients.

Cluster headache is a vascular headache that occurs in cyclical patterns or clusters of severe or very severe unilateral orbital or supraorbital and/or temporal pain. The headache is accompanied by at least one of the following autonomic symptoms: ptosis (drooping eyelid), conjunctival injection, lacrimation, rhinorrhea, and, less commonly, facial blushing, swelling, or sweating. Bouts of one

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headache every other day to 8 attacks per day may last from weeks to months, usually followed by remission periods when the headache attacks stop completely. The pattern varies from one person to another, but most people have one or two cluster periods a year. During remission, no headaches occur for months, and sometimes even years. The intense pain is caused by the dilation of blood vessels, which creates pressure on the trigeminal nerve. While this process is the immediate cause of the pain, the etiology is not fully understood. It is more common in men than in women. One-year prevalence is estimated to be 0.5 to 1.0/1,000. Management of cluster headache consists of abortive and preventive treatment. Abortive treatments include subcutaneous injection of sumatriptan, topical anesthetics sprayed into the nasal cavity, and strong coffee. Some patients respond to rapidly inhaled pure oxygen. A variety of other pharmacologic and behavioral methods of aborting and preventing attacks have been reported with wide variation in patient response.

As of January 2011, the U.S. Food and Drug Administration (FDA) had not cleared any occipital nerve stimulation device for treatment of headache. The Synergy IPG implanted stimulator device from Medtronic received marketing clearance in 1999 for management of chronic, intractable pain of the trunk or limbs, and off-label use for headache is described in the literature. Medtronic and Boston Scientific Neuromodulation Systems are currently conducting clinical trials of devices.

Related Policies:

Spinal Cord Stimulation

Vagus Nerve Stimulation

****Note: This Medical Policy is complex and technical. For questions concerning the technical language and/or specific clinical indications for its use, please consult your physician.*

Policy

Occipital Nerve Stimulation is considered investigational for all applications. BCBSNC does not cover investigational services or procedures.

Benefits Application

This medical policy relates only to the services or supplies described herein. Please refer to the Member's Benefit Booklet for availability of benefits. Member's benefits may vary according to benefit design; therefore member benefit language should be reviewed before applying the terms of this medical policy.

When Occipital Nerve Stimulation is covered

Not applicable.

When Occipital Nerve Stimulation is not covered

Occipital nerve stimulation is considered investigational for all indications.

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Policy Guidelines

Evidence of efficacy for occipital nerve stimulation (ONS) for treatment of chronic headache is limited to reports of small case series with short follow-up. Randomized controlled trials (to account for potential placebo effect) with greater numbers of patients and longer follow-up are needed. In addition, these trials must compare outcomes of ONS with outcomes of other possible alternative treatments. The available evidence, from small uncontrolled trials, is insufficient to permit conclusions concerning the impact of ONS on health outcomes. In addition, no occipital nerve stimulators have received U.S. Food and Drug Administration (FDA) approval.

Billing/Coding/Physician Documentation Information

This policy may apply to the following codes. Inclusion of a code in this section does not guarantee that it will be reimbursed. For further information on reimbursement guidelines, please see Administrative Policies on the Blue Cross Blue Shield of North Carolina web site at www.bcbsnc.com. They are listed in the Category Search on the Medical Policy search page.

Applicable codes: There is no specific CPT code for occipital nerve stimulation.

The following codes may be submitted for this service: 61885, 61886, 61888, 64553, 64555, 64575, 64585, 64590, 64595, or 64999.

Diagnosis codes that are subject to medical necessity review: 307.81, 346 – 346.9x, 625.4, 627.2, 784.0

BCBSNC may request medical records for determination of medical necessity. When medical records are requested, letters of support and/or explanation are often useful, but are not sufficient documentation unless all specific information needed to make a medical necessity determination is included.

Scientific Background and Reference Sources

BCBSA Medical Policy Reference Manual [Electronic Version]. 7.01.125, 2/11/2010

Senior Medical Director – 6/2010

Medical Director – 4/2011

BCBSA Medical Policy Reference Manual [Electronic Version]. 7.01.125,2 /10/2011

Specialty Matched Consultant Advisory Panel – 5/2011

BCBSA Medical Policy Reference Manual [Electronic Version]. 7.01.125, 11/10/2011

Policy Implementation/Update Information

8/3/10 New policy. Occipital nerve stimulation is considered investigational for all indications. Reviewed by Senior Medical Director 7/6/2010. Notice given 8/3/2010. Effective date 11/9/2010. (btw)

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11/9/10 Removed CPT 64555 from “Coding/Billing” section. It does not seem to apply to this policy. Added “*Diagnosis codes that are subject to medical necessity review:*” to the “Billing/Coding” section. (btw)

7/1/11 Specialty Matched Consultant Advisory Panel review 5/30/2011. No change to policy intent. Removed deleted CPT code 64573 from the “Billing/Coding” section. Added CPT codes 61888, 64555, 64585, 64590, and 64595. References added. (btw)

2/7/12 Reference added. (btw)

Medical policy is not an authorization, certification, explanation of benefits or a contract. Benefits and eligibility are determined before medical guidelines and payment guidelines are applied. Benefits are determined by the group contract and subscriber certificate that is in effect at the time services are rendered. This document is solely provided for informational purposes only and is based on research of current medical literature and review of common medical practices in the treatment and diagnosis of disease. Medical practices and knowledge are constantly changing and BCBSNC reserves the right to review and revise its medical policies periodically.