



BlueCross BlueShield  
of Alabama

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**Name of Policy:**

**Treatment of Cervicogenic Headache and Occipital Neuralgia**

Policy #: 314  
Category: Surgery

Latest Review Date: March 2011  
Policy Grade: B

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**Background/Definitions:**

*As a general rule, benefits are payable under Blue Cross and Blue Shield of Alabama health plans only in cases of medical necessity and only if services or supplies are not investigational, provided the customer group contracts have such coverage.*

*The following Association Technology Evaluation Criteria must be met for a service/supply to be considered for coverage:*

- 1. The technology must have final approval from the appropriate government regulatory bodies;*
- 2. The scientific evidence must permit conclusions concerning the effect of the technology on health outcomes;*
- 3. The technology must improve the net health outcome;*
- 4. The technology must be as beneficial as any established alternatives;*
- 5. The improvement must be attainable outside the investigational setting.*

*Medical Necessity means that health care services (e.g., procedures, treatments, supplies, devices, equipment, facilities or drugs) that a physician, exercising prudent clinical judgment, would provide to a patient for the purpose of preventing, evaluating, diagnosing or treating an illness, injury or disease or its symptoms, and that are:*

- 1. In accordance with generally accepted standards of medical practice; and*
- 2. Clinically appropriate in terms of type, frequency, extent, site and duration and considered effective for the patient's illness, injury or disease; and*
- 3. Not primarily for the convenience of the patient, physician or other health care provider; and*
- 4. Not more costly than an alternative service or sequence of services at least as likely to produce equivalent therapeutic or diagnostic results as to the diagnosis or treatment of that patient's illness, injury or disease.*

## **Description of Procedure or Service:**

Cervicogenic headache and occipital neuralgia are syndromes whose diagnosis and treatment have been reported as controversial in the medical literature due to lack of expert consensus regarding their etiology and treatment. The terminology refers to specific types of headache thought to arise from impingement or entrapment of the occipital nerves and/or the upper spinal vertebrae. Compression and injury of the occipital nerves within the muscles of the neck and compression of the second and third cervical nerve roots are generally thought to be responsible for the symptoms including unilateral and occasionally bilateral head, neck, and arm pain. The convergence of the afferents of the upper three cervical spinal nerves is thought to be responsible for this head pain that arises from the neck. Generally accepted causes of head pain originating in the neck include: developmental abnormalities, tumors, ankylosing spondylitis, rheumatoid arthritis, and osteomyelitis. Controversial causes include: cervical disc herniations, degenerative disc disease, and whiplash injuries. The International Headache Society (IHS), through expert consensus, has created a headache classification system to help diagnose and classify headaches. The IHS criteria are regarded as the gold standard for diagnosis of all types of headaches. The first edition was published in 1988 and the second edition in 2003. The second edition classifies headaches into 3 major groups. The first group, the primary headaches, includes migraine, tension-type headache, cluster and other trigeminal cephalgias, and other primary headaches. The second group, the secondary headaches, includes headaches attributed to head and/or neck trauma, cranial or cervical vascular disorder, non-vascular intracranial disorder, a substance or its withdrawal, infection, disorder of homeostasis, disorder of cranial or facial structures, or psychiatric disorder. The third group includes cranial neuralgias, central or primary facial pain, and other headaches.

### **Cervicogenic Headache**

The prevalence of cervicogenic headache in the general population is about 0.4%-2.5% and is four times more prevalent in women. The clinical features of cervicogenic headache may mimic those associated with primary headache disorders, such as tension-type headache, migraine, or hemicrania continua, so it may be difficult to distinguish among headache types. Cervicogenic headache is characterized by continuous, unilateral head pain radiating from the occipital areas to the frontal area, with associated neck pain and ipsilateral shoulder or arm pain. The headache is non-throbbing and of moderate intensity. It is described as a dull, boring, dragging pain that can fluctuate in intensity. The headache may last from a few hours to several days and, in some cases, for several weeks. The pain is exacerbated by neck movements and is usually caused by neck trauma. Associated symptoms, such as nausea, photophobia, phonophobia, dizziness, blurred vision, and dysphagia may be present, but are generally not pronounced.

The IHS considers the diagnostic criteria for cervicogenic headache as follows:

- Pain referred from a source in the neck and perceived in one or more regions of the head and/or face.
- Clinical, laboratory and/or imaging evidence of a disorder or lesion within the cervical spine or soft tissues of the neck, generally accepted as a valid cause of headache.
- Evidence that the pain can be attributed to the neck disorder or lesion, based on either clinical signs that implicate a source of pain in the neck or abolition of headache following diagnostic nerve block.

- Pain resolving within three months after successful treatment of causative disorder or lesion.

### **Occipital Neuralgia**

Occipital neuralgia results in posterior occipital headaches when pressure occurs on the greater and/or lesser occipital nerves. It may be classified as intermittent (e.g., paroxysmal) or continuous, with an acute or chronic nature. Paroxysmal occipital neuralgia is pain that occurs only in the distribution of the greater occipital nerve. The attacks are unilateral, with sudden and severe pain prescribed as sharp, twisting or lancing. The attacks may occur spontaneously but can be provoked by specific maneuvers applied to the back of the scalp or neck regions. Acute continuous occipital neuralgia attacks can last for many hours, with a duration of up to two weeks before remission. This type is not usually associated with radiating facial symptoms. In chronic continuous occipital neuralgia, the attacks are accompanied by localized muscle spasms. The pain is described as steady, sharp or aching, with referred pain into facial areas, especially above and behind the orbit. Unilateral pain is more common, but it can be bilateral also. Scalp tenderness is common. Pain may be increased or be provoked with postures that occur in reading or sleeping positions or with hyperextension or rotation of the head to the involved side. Physical findings include pain with palpation of the occipital nerves. Occasionally, there is hyperesthesia or allodynia in the distribution of the occipital nerve. Local muscle spasm is frequently found with palpable trigger points and taut bands. Cervical range of motion may be restricted, and neurological exams are typically normal. An anesthetic block given at the site of maximal tenderness or at the site of the occipital groove confirms the diagnosis of occipital neuralgia if there is pain relief.

The IHS considers the diagnostic criteria for occipital neuralgia as follows:

- Paroxysmal, stabbing pain, with or without persistent aching between paroxysms, in the distribution of the greater, lesser, and/or third occipital nerves.
- Tenderness over the affected nerve.
- Pain eased temporarily by local anesthetic block of the nerve.

### **Treatments**

There are numerous treatments for cervicogenic headache and occipital neuralgia noted in the literature that have been attempted with varying levels of success. Pharmacological treatment with oral analgesics, anti-inflammatory medications, tricyclic antidepressants, and anticonvulsant medications have been used alone or in combination with other treatment modalities. The literature also notes some other methods, including: the use of a cervical collar during the acute phase; physical therapy with stretching and strengthening exercises; postural training; relaxation exercises; transcutaneous nerve stimulation (TENS); and manual therapy, such as spinal manipulation and spinal mobilization.

The use of oral medications is not effective for some patients, so other treatments have been proposed, such as local injections of anesthetics and/or steroids and epidural steroid injections. Other treatments for cervicogenic headache and occipital neuralgia that have been investigated include radiofrequency ablation of the planum nuchale, rhizotomy, ganglionectomy, nerve root

decompression, discectomy and spinal fusion. These are generally performed under local or general anesthesia.

One commonly used diagnostic procedure for pain relief is the use of local injected anesthetics, with or without a corticosteroid, to block the affected nerves. These injections have been used as therapeutic treatment measures for pain relief, although the duration of pain relief varies from hours to months. However, the scientific evidence regarding injection therapy or percutaneous nerve block for occipital neuralgia and cervicogenic headache has been limited.

Another proposed treatment method for chronic intractable headaches is the use of peripheral nerve electrical stimulation, either by the percutaneous route or by an implantable electrical stimulator. These methods have also been used to treat chronic pain of the trunk and limbs.

Radiofrequency (RF) has been used as a minimally invasive treatment for various chronic pain syndromes including headaches and occipital neuralgia. Radiofrequency procedures have been reported to have a high number of complications compared with other ablative neurosurgical procedures. Conventional RF procedures can result in worsening of pain symptoms or a new onset of pain in some patients. Pulsed radiofrequency uses a pulsed time cycle that delivers short burst of RF energy to nervous tissue. Pulsed radiofrequency is performed under fluoroscopic guidance and is purported to be a less painful alternative to conventional radiofrequency therapy.

Pulsed radiofrequency modulation is also being used to treat migraines

### **Policy:**

The following treatments for **chronic headaches, including cervicogenic headache, occipital neuralgia, and migraine do not meet** Blue Cross and Blue Shield of Alabama's medical criteria for coverage and are considered **not covered**:

- Botulinum toxin – **(Effective for dates of service on or after October 15, 2010, please refer to Medical Policy #074, Botulinum Toxin, for coverage criteria for migraines.)**
- Discectomy and spinal fusion
- Electrical stimulation of occipital nerve
- Ganglionectomy
- Nerve root decompression
- Neurectomy
- Occipital nerve neurolysis
- Radiofrequency denervation of cervical facet joints
- Radiofrequency ablation of the planum nuchale
- Rhizotomy
- Dorsal column stimulation
- Surgical release of the lesser occipital nerve within the trapezius
- Neurolysis of the great occipital nerve with or without section of the inferior oblique muscle
- Pulsed radiofrequency

- Injection of anesthetic
- Implantable infusion pumps (refer to Medical Policy #442 for additional information)

The safety and effectiveness of these treatments for these indications have not been established.

*Blue Cross and Blue Shield of Alabama does not approve or deny procedures, services, testing, or equipment for our members. Our decisions concern coverage only. The decision of whether or not to have a certain test, treatment or procedure is one made between the physician and his/her patient. Blue Cross and Blue Shield of Alabama administers benefits based on the member's contract and corporate medical policies. Physicians should always exercise their best medical judgment in providing the care they feel is most appropriate for their patients. Needed care should not be delayed or refused because of a coverage determination.*

### **Key Points:**

There are numerous reports in the literature on the literature on the treatment of chronic headaches, including cervicogenic headache and occipital neuralgia. Some of these are summarized below. The first group of published reports is on the use of local injection therapy with various agents as treatment methods.

Freund et al (2000) reported on a randomized controlled study to evaluate therapy with botulinum toxin A (BTX-A) as a treatment for cervicogenic headache. There were 26 chronic headache patients: one half received botulinum toxin A injections and one half received saline injections. The results showed that at four weeks, the patients who received BTX-A had significantly lower pain scores than they had prior to treatment. However, patients who received the placebo injection also had lower pain scores. There was no statistically significant difference between the two groups. The results suggest a substantial placebo effect or a nonspecific effect of injection.

Kapur et al (2007) reported on a retrospective trial of six patients with severe occipital neuralgia who had conservative and interventional therapies, including oral antidepressants, membrane stabilizers, opioids, and traditional occipital nerve blocks without traditional relief. The group then underwent occipital nerve blocks using botulinum toxin type A. In 5/6 patients, there were significant decreases in pain visual analog scale (VAS) scores and improvement in pain disability index (PDI) at four weeks follow-up. The duration of pain relief increased as compared to diagnostic 0.5% bupivacaine block (median 16 weeks vs. median two weeks). Following block resolution, the average pain scores and PDI returned to similar levels as before the botulinum toxin block. This was a small study group.

Naja et al (2006) reported on a randomized controlled trial that evaluated the effectiveness of nerve stimulator guided occipital nerve blockade to treat cervicogenic headache. There were 50 patients who were randomly divided into two groups of 25 patients each. All patients in both groups received greater and lesser occipital blocks, but only 16 patients in each group received facial nerve blockade in association with the occipital blocks. The control group received injections of an equivalent volume of normal saline. Pain was assessed using the visual analog scale (VAS) and the total pain index (TPI). There were 47 patients at follow-up. The results

showed the anesthetic block was effective in reducing the VAS and TPI by approximately 50% from baseline values. Analgesic consumption, duration of headache and its frequency, nausea, vomiting, photophobia, phonophobia, decreased appetite, and limitations in functional activities were significantly less in block group compared to control group. The nerve stimulator-guided occipital nerve blockade significantly relieved cervicogenic headache and associated symptoms at two weeks following injection. The authors reported the limitations of this study were the short duration of follow-up and the difficulty in blinding when numbness resulted in patients who received the anesthetic block. Naja et al (2006) also reported on a follow up study of these patients. They reported that 41/47 patients (87%) required more than one injection to achieve six-month pain-relief period. For every three years of headache history, the outcomes demonstrated that a patient needed one additional injection to the basic injection. Bogduk (2004) reported that a response to diagnostic blockade of cervical structures or nerves is an appropriate diagnostic criterion that establishes headaches arise in the neck. He reported that many, but not all, patients can be temporarily relieved of pain by blocking the greater occipital nerve, the C-2 spinal nerve, or the C2-3 zygapophysial joint. The author noted that the available studies have not used controlled blocks to establish the validity of the response, and the studies do not provide conclusive evidence of a cervical source of pain for cervicogenic headache.

Martelletti et al (2004) published a review of various treatments for cervicogenic headache that range from lowly invasive, drug-based therapies to highly invasive, surgical-based therapies. They noted that a curative therapy will not be developed until increased knowledge of the etiology and pathophysiology of the condition becomes available. They noted that the paucity of experimental models for cervicogenic headache and the relative lack of biomolecular markers for the condition mean much is still unclear about cervicogenic headache and the disorder remains inadequately treated.

There are several studies on the use of surgical treatment for cervicogenic headache or occipital neuralgia. Some of these are summarized below.

Gille et al (2004) reported on a retrospective study of 10 patients who had surgery for greater occipital neuralgia, which consisted of neurolysis of the greater occipital nerve and section of the inferior oblique muscle. The average age of the patients was 62 years and the average follow up was 37 months. The results showed anatomic anomalies in three patients (i.e., hypertrophy of venous plexus around C2, nerve penetration of the inferior oblique muscle, and degenerative C1-C2 osteoarthritis). The mean VAS score was 80/100 before surgery and 20/100 at the last follow-up. The consumption of analgesics decreased and 7/10 patients were satisfied with the operation.

Kapoor et al (2003) reported on a retrospective study of 17 patients with occipital neuralgia who underwent CT fluoroscopy-guided C2 or C3 nerve root blocks and had positive results. All 17 patients then underwent unilateral (n = 16) or bilateral (n = 1) intradural dorsal rhizotomies. Immediately after surgery, all patients had complete relief from pain. Patients were followed a mean of 20 months. At follow up, 11 patients (64.7%) had complete relief of symptoms; two (11.8%) had partial relief; and four (23.5%) had no relief. There were seven of eight (87.5%) patients without prior surgery who had complete relief of symptoms and four of nine (44.4%) patients with a history of prior surgery who had relief. Eight of 16 (50%) patients felt they were

more active and functional after surgery, and 25% felt they were either unchanged or less functional than before surgery. There was a trend toward better response to rhizotomy in patients without prior head or neck surgery. The study was limited by its size and lack of control group.

Jansen (2000) reported the results of three different surgical treatments in 102 patients with cervicogenic headache that had been non-responsive to physical or drug therapy. A group of 38 patients were treated with C2 ganglionectomy, and 64 patients with demonstrable spinal structural abnormalities were treated with dorsal or ventral spinal decompression and fusion. About 80% of surgically treated patients were relieved of pain. About 15% of patients had 60-80% relief of pain and about 6% of patients had no relief of pain. The mean duration of pain relief varied: five months for dorsal decompression, 14 months for ventral decompression, and 44 months for C2 ganglionectomy.

Stovner et al (2004) reported on a randomized, controlled study of 12 patients with unilateral cervicogenic headache. The patients were randomized to receive radiofrequency neurotomy of facet joints C2-C6 (n = 6) or to sham treatment (n = 6). The patients were followed for two years. The results showed the treated group had some improvement at three months, but later there were no marked differences between the groups. The authors concluded that the procedure is probably not beneficial in cervicogenic headache.

There are a variety of other therapeutic modalities that have been studied, including peripheral nerve electrical stimulation. Some of these reports are summarized below.

Weiner et al (1999) reported on a study of 13 patients who underwent percutaneous peripheral nerve electrical stimulation for medically refractory occipital neuralgia. The results showed that 12 of 13 patients reported good to excellent response with > 50% pain control at follow-up of 1½ to six years. This was a small study group, and the long-term efficacy of occipital nerve stimulation requires further study.

Kapural et al (2005) reported on a case series of six patients with severe occipital neuralgia who underwent occipital nerve electrical stimulation lead implantation using a modified midline approach. These patients had previously been treated with oral antidepressants, membrane stabilizers, opioids, occipital nerve blocks, and radiofrequency ablations. Significant decreases in pain visual analog scale (VAS) scores and drastic improvement in functional capacity were observed during the occipital stimulation trial and during the three month follow-up after implantation. The mean VAS score changed from  $8.66 \pm 1.0$  to  $2.5 \pm 1.3$ . The pain disability index improved from  $49.8 \pm 15.9$  to  $14.0 \pm 7.4$ . These findings need to be validated by randomized controlled trials.

Johnstone et al (2006) reported on a series of eight patients with intractable occipital neuralgia who were treated with percutaneous stimulation over one week. Out of eight patients, seven achieved 50% pain reduction and proceeded to a permanent stimulator. There was reduction in the visual analogue score post implantation in 5/7 patients. This was a small study group.

Slavin et al (2006) analyzed the records of 14 patients with chronic, intractable occipital neuralgia treated with peripheral nerve stimulation (PNS). Overall, 23 occipital nerves were stimulated in 14 patients. There were 17 trials in 10 patients considered successful, and those patients had permanent internalization of the stimulator. At the time of the last follow-up exam (mean 22 months), seven patients (70%) with implanted PNS had adequate pain control. There were two patients who had their systems explanted due to loss of stimulation effect or significant improvement of pain, and one patient had part of the hardware removed because of infection. The authors concluded that chronic peripheral nerve stimulation may be a safe and relatively effective method for long-term treatment of chronic pain syndrome in patients with medically intractable occipital neuralgia. This was a small study (only 14 patients). The authors stated that this study had a large variation between patients in regard to the etiology of their occipital neuralgia; therefore, they were unable to find any correlation between etiology of occipital neuralgia and the outcome of stimulation.

Schwedt et al (2007) reported on a retrospective analysis of 15 patients with medically intractable headache who underwent implantation of an occipital nerve stimulator. There were 15 patients (12 female, 3 male), (mean age 39 years), who had chronic migraine (n = 8), chronic cluster (n = 3), hemicrania continua (n = 2), or post-traumatic (n = 2) headache. Patients underwent either bilateral (n = 8) or unilateral (n = 7) lead placement. Patients were measured after 5-42 months. The results showed that all six headache measures improved significantly from baseline, including headache frequency per 90 days, headache severity, MIDAS disability, HIT-6 scores, BDI-II, and subjective pain. Most patients (60%) required lead revision within one year. The authors noted that safety and efficacy results from prospective, randomized, sham-controlled studies in patients with medically refractory headache are needed.

Boston Scientific Corporation is sponsoring the PRISM (Precision Implantable Stimulator for Migraine) clinical trial in which the Precision implantable stimulator is used to treat approximately 150 migraine headache patients, at up to 15 sites in the U.S. This ongoing trial will assess the safety and efficacy of occipital nerve stimulation as a treatment for refractory migraine headaches. The implantable pulse generator will deliver electrical impulses to the occipital nerves located just under the skin at the back of the neck. The Precision neurostimulation system is approved by the U.S. Food and Drug Administration (FDA) for spinal cord stimulation to treat intractable chronic pain of the trunk and limbs. The use of the Precision neurostimulation system for treatment of refractory migraine headache is considered investigational and limited by Federal Law to investigational use only in the U.S.

Published evidence on the effectiveness of pulsed radiofrequency in the treatment of patients with headaches and occipital neuralgia is limited and based on retrospective, case series studies. Bayer and colleagues evaluated the effectiveness of sphenopalatine ganglion pulsed radiofrequency (SPG-PRF) treatment in patients suffering from chronic head and face pain. A total of 30 patients were observed from four to 52 months after PRF treatment. The primary outcome measures were reduction in oral medication use (including opioids), time to next treatment modality for presenting symptoms, duration of pain relief, and the presence of residual symptoms. Secondary outcome measures included the evaluation of adverse effects and complications. All data were derived from patient charts, phone conversations, and clinical follow-up visits. A total of 14 % of respondents reported no pain relief, 21 % had complete pain



relief, and 65 % of the patients reported mild-to-moderate pain relief from SPG-PRF treatment. A total of 65 % of the respondents reported mild-to-moderate reduction in oral opioids. None of the patients developed significant infection, bleeding, hematoma formation, dysesthesia, or numbness of palate, maxilla, or posterior pharynx. The authors concluded that these findings suggested that a prospective, randomized, controlled study to confirm the safety and effectiveness of PRF treatment for chronic head and face pain is justified.

In a 2008 review article, Byrd and Mackey concluded, “Despite the appeal of pulsed radiofrequency (PRF), there remain a number of obstacles preventing its more widespread inclusion into the armamentarium of pain management procedures. A formidable problem is the relative lack of randomized controlled studies substantiating the efficacy of PRF. Further evaluation, however, will determine whether PRF falls by the wayside as another ballyhooed intervention or persists as a legitimate therapeutic tool”.

There is limited information available on the use of pulsed radiofrequency modulation for migraine headaches. Pulsed radiofrequency modulation for migraine via the stellate ganglion, located in front of the junction between C7 vertebral body and the transverse process, has also been used as a technique for relief. Stellate ganglion blocks have also been used and uncontrolled reports indicate this procedure provides effective pain relief or may even reverse the course of early stage complex regional pain syndrome type I. Side effects that can occur, particularly without the use of fluoroscopy, include injection of local anesthetics into critical structures of the neck, such as the carotid and vertebral arteries or intrathecal space. Incorrectly placed injections of local anesthetics may lead to loss of consciousness, seizures, paralysis, cardiac arrest, hoarseness, shortness of breath, sensation of an obstacle in the throat, and death.

The available evidence from the small number of case series and retrospective studies published in the peer-reviewed literature is insufficient to conclude that any of the above mentioned treatment methods, i.e., local injection therapy, surgery, or peripheral nerve stimulation, are effective treatments for occipital neuralgia or cervicogenic headache. The limited data suggest that some patients may obtain a short-term benefit from some of these treatment methods, but the long-term efficacy and safety remains unknown.

**Key Words:**

Cervicogenic headache, occipital neuralgia, migraine headache

**Approved by Governing Bodies:**

Not applicable

**Benefit Application:**

Coverage is subject to member’s specific benefits. Group specific policy will supersede this policy when applicable.

ITS: Home Policy provisions apply

FEP contracts: Special benefit consideration may apply. Refer to member's benefit plan. FEP does not consider investigational if FDA approved and will be reviewed for medical necessity. Pre-certification requirements: Not applicable

### **Current Coding:**

CPT Codes:

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|--------------|--|
| <b>63020</b> | Laminotomy (hemilaminectomy), with decompression of nerve root(s), including partial facetectomy, foraminotomy and/or excision of herniated intervertebral disc, including open and endoscopically-assisted approaches; one interspace, cervical   |
| <b>63030</b> | Laminotomy (hemilaminectomy), with decompression of nerve root(s), including partial facetectomy, foraminotomy and/or excision of herniated intervertebral disc; one interspace, lumbar  |
| <b>63035</b> | Laminotomy (hemilaminectomy), with decompression of nerve root(s), including partial facetectomy, foraminotomy and/or excision of herniated intervertebral disc; including open and endoscopically-assisted approaches; each additional interspace, cervical or lumbar (list separately in addition to code for primary procedure) |
| <b>63040</b> | Laminotomy (hemilaminectomy), with decompression of nerve root(s), including partial facetectomy, foraminotomy and/or excision of herniated intervertebral disc, reexploration, single interspace; cervical  |
| <b>63043</b> | Laminotomy (hemilaminectomy), with decompression of nerve root(s), including partial facetectomy, foraminotomy and/or excision of herniated intervertebral disc, reexploration, single interspace; each additional cervical interspace (list separately in addition to code for primary procedure)                                 |
| <b>63045</b> | Laminectomy, facetectomy and foraminotomy (unilateral or bilateral with decompression of spinal cord, cauda equine and/or nerve root(s), (e.g., spinal or lateral recess stenosis)), single vertebral segment; cervical  |
| <b>63048</b> | Laminectomy, facetectomy and foraminotomy (unilateral or bilateral with decompression of spinal cord, cauda equina and/or nerve root(s), (e.g., spinal or lateral recess stenosis)), single vertebral segment; each additional segment, cervical, thoracic, or lumbar (list separately in addition to code for primary procedure)  |
| <b>63050</b> | Laminoplasty, cervical, with decompression of the spinal cord, two or more vertebral segments;   |
| <b>63075</b> | Discectomy, anterior, with decompression of spinal cord and/or nerve root(s), including osteophyctomy; cervical, single interspace   |
| <b>63076</b> | Discectomy, anterior, with decompression of spinal cord and/or nerve root(s), including osteophyctomy; cervical, each additional   |

- interspace (list separately in addition to code for primary procedure)
- 63081** Vertebral corpectomy (vertebral body resection), partial or complete, anterior approach with decompression of spinal cord and/or nerve root(s); cervical, single segment
- 63082** Vertebral corpectomy (vertebral body resection), partial or complete, anterior approach with decompression of spinal cord and/or nerve root(s); cervical, each additional segment (list separately in addition to code for primary procedure)
- 63185** Laminectomy with rhizotomy; one or two segments
- 63190** Laminectomy with rhizotomy; more than two segments
- 63650** Percutaneous implantation of neurostimulator electrode array, epidural
- 63655** Laminectomy for implantation of neurostimulator electrodes, plate/paddle, epidural
- 63661** Removal of spinal neurostimulator electrode percutaneous array(s), including fluoroscopy, when performed (**Effective 01/01/2010**)
- 63662** Removal of spinal neurostimulator electrode plate/paddle(s) placed via laminotomy or laminectomy, including fluoroscopy, when performed (**Effective 01/01/2010**)
- 63663** Revision including replacement, when performed, of spinal neurostimulator electrode percutaneous array(s), including fluoroscopy, when performed (**Effective 01/01/2010**)
- 63664** Revision including replacement, when performed, of spinal neurostimulator electrode plate/paddle(s) placed via laminotomy or laminectomy, including fluoroscopy, when performed (**Effective 01/01/2010**)
- 63685** Insertion or replacement of spinal neurostimulator pulse generator or receiver, direct or inductive coupling
- 63688** Revision or removal of implanted spinal neurostimulator pulse generator or receiver
- 64405** Injection, anesthetic agent; greater occipital nerve
- 64450** Injection, anesthetic agent; other peripheral nerve or branch
- 64555** Percutaneous implantation of neurostimulator electrodes array; peripheral nerve (excludes sacral nerve)
- 64600** Destruction by neurolytic agent, trigeminal nerve; supraorbital, intraorbital, mental, or inferior alveolar branch
- 64612** Chemo-denervation of muscle(s); muscle(s) innervated by facial nerve, unilateral (e.g., for blepharospasm, hemifacial spasm)
- 64615** Chemodenervation of muscle(s); muscle(s) innervated by facial, trigeminal, cervical spinal and accessory nerves, bilateral (e.g., for chronic migraine) (**Effective 01/01/2013**)
- 64616** Chemodenervation of muscle(s); neck muscle(s), excluding muscles of the larynx, unilateral (e.g., for cervical dystonia, spasmodic torticollis) (**Effective 01/01/2014**)

- 64633** Destruction by neurolytic agent, paravertebral facet joint nerve(s), with imaging guidance (fluoroscopy or ct); cervical or thoracic, single facet joint (**Effective 01/01/2012**)
- 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) (**Effective 01/01/2012**)
- 64640** Destruction by neurolytic agent; other peripheral nerve or branch
- 64716** Neuroplasty and/or transposition; cranial nerve (specify)
- 64727** Internal neurolysis, requiring use of operating microscope (List separately in addition to code for neuroplasty) (Neuroplasty includes external neurolysis)
- 64744** Transection or avulsion of; greater occipital nerve
- 64802** Sympathectomy, cervical
- 64804** Sympathectomy, cervicothoracic
- 95970** Electronic analysis of implanted neurostimulator pulse generator system (e.g. rate, pulse amplitude, pulse duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient compliance measurements); simple or complex brain, spinal cord, or peripheral (i.e. cranial nerve, peripheral nerve, sacral nerve, neuromuscular) neurostimulator pulse generator/transmitter, without programming
- 95971** Electronic analysis of implanted neurostimulator pulse generator system (e.g., rate, pulse amplitude, pulse duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient compliance measurements); simple spinal cord, or peripheral (i.e., peripheral nerve, autonomic nerve, neuromuscular) neurostimulator pulse generator/transmitter, with intraoperative or subsequent programming

HCPCS:

- E0745** Neuromuscular stimulator, electronic shock unit
- J0585** Injection, OnabotulinumtoxinA, one unit
- J0587** Injection, RimabotulinumtoxinB, 100 units
- L8681** Patient programmer (external) for use with implantable programmable neurostimulator pulse generator, replacement only
- L8682** Implantable neurostimulator radiofrequency receiver
- L8683** Radiofrequency transmitter (external) for use with implantable neurostimulator radiofrequency receiver
- L8684** Radiofrequency transmitter (external) for use with implantable sacral root neurostimulator receiver for bowel and bladder management, replacement
- L8685** Implantable neurostimulator pulse generator, single array, rechargeable, includes extension

<b>L8686</b>	Implantable neurostimulator pulse generator, single array, non-rechargeable, includes extension
<b>L8687</b>	Implantable neurostimulator pulse generator, dual array, rechargeable, includes extension
<b>L8688</b>	Implantable neurostimulator pulse generator, dual array, non-rechargeable, includes extension
<b>L8689</b>	External recharging system for battery (internal) for use with implantable neurostimulator, replacement only
<b>L8695</b>	External recharging system for battery (internal) for use with implantable neurostimulator, replacement only ( <b>Effective 01/01/2009</b> )

### **Previous Coding:**

CPT Codes:

<b>L8680</b>	Implantable neurostimulator electrode (with any number of contact points), each ( <b><u>Deletes effective July 1, 2014</u></b> )
<b>63660</b>	Revision or removal of spinal neurostimulator electrode percutaneous array(s) or plate/paddle(s) ( <b>Deleted 01/01/2010</b> )
<b>64613</b>	Chemo-denervation of muscle(s); neck muscle(s) (e.g., for spasmodic torticollis, spasmodic dysphonia) ( <b>Deleted 01/01/2014</b> )
<b>64626</b>	Destruction by neurolytic agent, paravertebral facet joint nerve; cervical or thoracic, single level ( <b>Deleted 01/01/2010</b> )
<b>64627</b>	Destruction by neurolytic agent, paravertebral facet joint nerve; cervical or thoracic, each additional level (List separately in addition to code for primary procedure) ( <b>Deleted 01/01/2010</b> )

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### **Policy History:**

Medical Policy Group, January 2008 **(3)**

Medical Policy Administration Committee, February 2008

Available for comment February 9-March 24, 2008

Medical Policy Group, August 2008 **(2)**

Medical Policy Administration Committee, August 2008

Available for comment, August 13-September 26, 2008

Medical Policy Group, November 2008 **(1)**

Medical Policy Administration Committee, December 2008

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Medical Policy Group, August 2010 **(3)**

Medical Policy Administration Committee, September 2010

Available for comment September 4-October 18, 2010

Medical Policy Group, October 2010

Medical Policy Group, March 2011 **(3)**

Medical Policy Group, December 2011 **(3)**: 2012 Coding Updates – Added 63030, 64633 and 64634, changed verbiage in 64555, 95970 and 95971 and deleted 64626 and 64627.

Medical Policy Group, December 2012 **(3)**: 2013 Coding Update: Verbiage change 64612 and addition of 64615

Medical Policy Group, June 2013 **(3)**: added bullet for clarification of implantable infusion pumps as injections as non-covered treatment

Medical Policy Group, December 2013 **(1)**: 2014 Coding Update: added new code 64616, effective 01/01/14; moved deleted code 64613 to previous coding, effective 01/01/14

Medical Policy Group, May 2014 **(5)**: 2014 Coding Update: Deleted code L8680 effective July 1, 2014.



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*This medical policy is not an authorization, certification, explanation of benefits, or a contract. Eligibility and benefits are determined on a case-by-case basis according to the terms of the member's plan in effect as of the date services are rendered. All medical policies are based on (i) research of current medical literature and (ii) review of common medical practices in the treatment and diagnosis of disease as of the date hereof. Physicians and other providers are solely responsible for all aspects of medical care and treatment, including the type, quality, and levels of care and treatment.*

*This policy is intended to be used for adjudication of claims (including pre-admission certification, pre-determinations, and pre-procedure review) in Blue Cross and Blue Shield's administration of plan contracts.*