Corporate Medical Policy

Injection Therapy for Headache (Migraine and Other) and Non-Spine Management

File Name: injection_therapy_for_headache_migraine_and_other_and_nonspine_management
Origination: 7/2017
Last Review: 10/2023

Description of Procedure or Service

Chronic migraine and severe headaches are common conditions and the available treatments are not universally effective. A proposed treatment option is blocking the sphenopalatine ganglion (SPG) nerve by applying an intranasal topical anesthetic. Several catheters approved by the U.S. Food and Drug Administration (FDA) are available for the SPG blocking procedure. Peripheral nerve injections or nerve blocks may also be used at various locations around the face and neck to numb the area using injectable anesthetic.

Headache

Headaches are common neurologic disorders and are among the top reasons that individuals seek medical care. Headaches affect approximately 50% of the general population in a given year and over 90% of people have a lifetime history of headache.

Occipital Neuralgia

Occipital neuralgia is a specific type of headache that is located on one side of the upper neck, back of the head, and behind the ears, and sometimes extending to the scalp, forehead, and behind the eyes. The pain, which may be piercing, throbbing, or electric-shock-like, follows the course of the greater and lesser occipital nerves. Occipital neuralgia is believed to occur due to pressure or irritation to the occipital nerves, which may result from injury, entrapment by tight muscles, or inflammation. Treatment may include massage and rest, muscle relaxants, nerve blocks, and injection of steroids directly into the affected area.

Cervicogenic Headache

Cervicogenic headache is a headache that is secondary to a disorder of the cervical spine. The pain may be referred from facet joints, intervertebral discs, or soft tissue. The pain is constant rather than throbbing, and may be aggravated by movements of the neck or pressure to certain areas on the neck. The first 3 cervical spinal nerves can refer pain to the head. The C1 suboccipital nerve innervates the atlanto-occipital joint; the C2 spinal nerve and the C3 dorsal ramus have close proximity to and innervate the C2-C3 facet joint. The C2-3 facet joint is the most frequent source of a cervicogenic headache. A diagnosis of a cervicogenic headache may be confirmed by an anesthetic block of the lateral atlanto-axial joint, the C2-3 facet joint, or the C3-4 facet joint. Treatment may include nerve blocks, medication, physical therapy, and exercise.

Migraine/other Non Migraine Headache

Migraines are the second-most common headache disorder. They are characterized by severe pain on one or both sides of the head, nausea, and, at times, disturbed vision. Migraines can be

categorized by headache frequency, and by the presence or absence of aura. Chronic migraines are defined as attacks at least 15 days per month for more than 3 months, with features of migraine at least 8 days per month.

Diagnostic criteria for tension headaches include the presence of at least two of the following characteristics: bilateral headache location, non-pulsating pain, mild-to-moderate intensity, and headache not aggravated by physical activity; lasting between 30 minutes and 7 days; and not accompanied by nausea, vomiting, photophobia, or phonophobia

Cluster headaches are less common than tension or migraine headaches. They are characterized by severe unilateral orbital, supraorbital, and/or temporal pain that also includes other symptoms in the eye and/or nose on the same side (e.g., rhinorrhea, eyelid edema or drooping).

Post dural puncture headache (PDPH) , is a common complication of lumbar puncture. PDPH also occurs with low cerebrospinal fluid volume from a leak at the site of the dural puncture, resulting in low cerebrospinal pressure and intracranial hypotension. Individuals undergoing epidural anesthesia are also at risk for PDPH due to unintended dural puncture. PDPH is characterized by a bilateral frontal or occipital headache that worsens with sitting or standing and is relieved in the supine position. Associated symptoms may include nausea, neck stiffness, low back pain, tinnitus and visual disturbances.

Treatment
A variety of medications are used to treat acute migraine episodes. They include medications taken at the onset of an attack to abort the attack (triptans, ergotamines) and medications to treat the pain and other symptoms of migraines once they are established (nonsteroidal anti-inflammatory drugs, antiemetics). Prophylactic medication therapy may be appropriate for people with migraines that occur more than 2 days per week. In addition to medication, behavioral treatments (e.g., relaxation, cognitive therapy) are used to manage migraine headache. Botulinum toxin type A injections are an FDA–approved treatment for chronic migraine. Several calcitonin-gene related peptide antagonists are available as FDA-approved treatment options for acute and prophylactic treatment of migraine.

Severe acute cluster headaches may be treated with abortive therapy including breathing 100% oxygen, and triptan medications. Other medications used to treat cluster headaches include steroids, calcium channel blockers, and nerve pain medications. Due to the severity of pain associated with cluster headaches, individuals may seek emergency treatment. Tension-type headaches are generally treated with over the counter pain medication.

Sphenopalatine Ganglion Block
Sphenopalatine ganglion (SPG) blocks are a proposed treatment option for chronic migraines and some severe non-migraine headaches. The SPG is a group of nerve cells located behind the bony structures of the nose. The nerve bundle is linked to the trigeminal nerve, the primary nerve involved in headache disorders. The SPG has both autonomic nerves, which are associated with functions such as tearing and nasal congestion, and sensory nerves, associated with pain perception. SPG blocks involve topical application of local anesthetic to mucosa overlying the SPG. The rationale for using SPG blocks to treat headaches is that local anesthetics in low concentrations could block the sensory fibers and thereby reduce pain while maintaining autonomic function.

The proposed procedure for SPG blockade is to insert an intranasal catheter that is attached to a syringe carrying local anesthetic (e.g., lidocaine, bupivacaine). Once the catheter is in place, the local anesthetic is applied to the posterior wall of the nasal cavity, reaching the SPG. Originally, SPG blocks were done by inserting a cotton-tipped applicator dabbed with local anesthetic into

the nose; this technique may be less accurate and effective than the currently proposed procedure. Neurostimulation of the SPG and SPG blockade with radiofrequency lesioning have been used outside of the United States, but these treatments are not cleared or approved by FDA.

Three catheter devices are commercially available in the United States for performing SPG blocks. The catheters have somewhat different designs, but all are attached to syringes that contain local anesthetic. The catheters are inserted intranasally and, once in place, the local anesthetic is applied through the catheter. With 2 of the 3 commercially available catheters (the SpenoCath®, Allevio™), patients are positioned on their back with their nose pointed vertically and their head turned to the side. With the Tx360® device, patients remain seated.

The optimal number and frequency of SPG treatments is unclear. Information from the American Migraine Foundation suggests that the procedure can be repeated as often as needed to control pain. A randomized controlled trial (RCT) has described a course of treatment for migraines consisting of SPG blocks twice a week for 6 weeks (total, 12 treatments).

SPG blocks are proposed for both short- and long-term treatment of headaches and migraines. When used in the emergency setting in patients with severe acute headaches, the goal of treatment is to abort the current headache while the patient is in the emergency department. In the RCT that provided a 6-week course of treatment with SPG blocks for chronic migraine (mentioned above), short-term outcomes were assessed up to 24 hours after each treatment, and the duration and frequency of chronic migraines were assessed at 1 and 6 months after the course of treatment.

Regulatory Status
The Tx360® Nasal Applicator (Tian Medical), the Allevio SPG Nerve Block Catheter (JET Medical), and the SpenoCath (Dolor Technologies) are considered class I devices by the U.S. Food and Drug Administration (FDA) and are exempt from 510(k) requirements. This classification does not require submission of clinical data on efficacy but only notification of FDA prior to marketing. All 3 devices are used to apply local anesthetic intranasally.

Related Policies
TENS (Transcutaneous Electrical Nerve Stimulator)
Occipital Nerve Stimulation
Surgical Deactivation of Headache Trigger Sites
Ablation and Neural Therapy Procedures for Headache and Pain Management
Bundling Guidelines
Anesthesia Services

Note: This policy does not address the use of these techniques to provide anesthesia for surgical procedures.

******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

Nerve blocks (peripheral or other injection pain blocks) are considered investigational for all indications, including but not limited to the treatment of acute or chronic migraine, regardless of type and/or other non-migraine type headaches and other pain syndromes. BCBSNC does not provide coverage for investigational services or procedures.

Injection Therapy for Headache (Migraine and Other) and Non-Spine Management

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 Injection Therapy for Headache (Migraine and Other) and Non-Spine Management is covered

Not applicable.

When Injection Therapy for Headache (Migraine and Other) and Non-Spine Management is not covered

Nerve blocks (peripheral or other injection pain blocks) are considered investigational for all indications, including but not limited to the treatment of acute or chronic migraine, regardless of type and/or other non-migraine type headaches and other pain syndromes.

This includes but is not limited to these nerves: sphenopalatine, trigeminal, occipital, auricular, periorbital, facial, suprascapular, spinal accessory, cervical plexus, axillary, brachial plexus, temporomandibular joint (TMJ), masseter, and unlisted neurologic procedures.

Policy Guidelines

For individuals who have chronic migraine who receive SPG block(s), the evidence includes a randomized controlled trial (RCT) and a case report. Relevant outcomes are symptoms, functional outcomes, quality of life, and treatment-related morbidity. The randomized trial evaluated a regimen of twelve SPG blocks over six weeks and was double-blind and placebo-controlled. The trial found significantly greater short-term (up to 24 hours) benefits from active treatment than from placebo. There were no significant long-term effects (i.e., 1 and 6 months after 12 treatments), although the trial was underpowered to detect longer term efficacy. Given that SPG blocks are being proposed as a preventive therapy for chronic migraines, evidence demonstrating reduced migraine frequency, severity, or other objective outcomes from robust trials is still needed. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

For individuals who have severe acute headache treated in the emergency setting who receive SPG block(s), the evidence includes one RCT. Relevant outcomes are symptoms, functional outcomes, quality of life, and treatment-related morbidity. The randomized, double-blind, placebo-controlled trial evaluated a single SPG block for severe acute headache of mixed etiologies. There was no statistically significant difference between active treatment and placebo for the primary outcome (pain reduction 15 minutes post-intervention). The trialists did not collect pain data again until 24 hours post-treatment, at which time significantly more patients were headache-free in the active treatment arm than in the placebo arm. Additional studies, preferably RCTs, are needed to determine whether SPG blocks are an effective treatment in the emergency setting. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

For individuals who have cluster headache who receive SPG block(s), the evidence includes case series. Relevant outcomes are symptoms, functional outcomes, quality of life, and treatment-related morbidity. Two small case series, both of which evaluated an approach for intranasal SPG blocks that differs from the intervention currently available in the United States, were identified. In these series, 40% to 50% of patients experienced complete symptom relief for a variable length of time and about 20% had treatment-related complications. However, it is not clear from these series the degree to which the procedures evaluated differ in safety and efficacy from an intranasal SPG block using a device cleared by the Food and Drug Administration. Additional studies, preferably RCTs, are needed to evaluate SPG blocks for treating cluster headaches. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

For individuals who have postdural puncture headache who receive SPG block(s), the evidence includes an RCT. Relevant outcomes are symptoms, functional outcomes, quality of life, and treatment-related morbidity. The small randomized, double-blind, placebo-controlled trial evaluated a single SPG block for postdural puncture headache in patients with both intended and accidental dural punctures. There was no statistically significant difference between active treatment and placebo for the primary outcome (median pain intensity in the upright position 30 minutes postintervention). Active rescue blocks were required in 65% of patients in each group, administered within an average of 1.4 hours for the active group and 1.5 hours for the placebo group. There was no statistically significant difference between active treatment and placebo for the number of patients requiring definitive treatment with an epidural blood patch. Additional studies, preferably RCTs, are needed to evaluate SPG blocks for treating postdural puncture headaches. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

Nerve blocks are a proposed treatment for chronic migraine headache and some severe non migraine headaches. The rationale for using nerve blocks to treat headaches is that local anesthetic in low concentration can block the sensory fibers and thereby reduce perceived pain. The optimal number and frequency of nerve blocks for headache is unclear and there are no nationally endorsed guidelines for use or scientific evidence based studies to support its utility of effectiveness in long term reduction of headache pain symptoms.

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: 20605, 20606, 20999, 64400, 64405, 64408, 64415, 64417, 64418, 64420, 64421, 64450, 64454, 64455, 64505, 64999.

ICD-10 diagnosis codes: G43.001, G43.009, G43.011, G43.019, G43.101, G43.109, G43.111, G43.119, G43.401, G43.409, G43.411, G43.419, G43.501, G43.509, G43.511, G43.519, G43.601, G43.609, G43.611, G43.619, G43.701, G43.709, G43.711, G43.719, G43.801, G43.809, G43.811, G43.819, G43.821, G43.829, G43.831, G43.839, G43.901, G43.909, G43.911, G43.919, G43.E01, G43.E09, G43.E11, G43.E19, G44.001, G44.009, G44.011, G44.019, G44.021, G44.029, G44.031, G44.039, G44.041, G44.049, G44.051, G44.059, G44.091, G44.099, G44.1, G44.201, G44.209, G44.211, G44.219, G44.221, G44.229, G44.301, G44.309, G44.311, G44.319, G44.321, G44.329,

G44.40, G44.41, G44.51, G44.52, G44.53, G44.59, G44.81, G44.82, G44.83, G44.84, G44.85, G44.89, G50.0, G50.1, M54.2, M54.81, M79.10, M79.11, M79.12, M79.7, R51.0, and R51.9

This procedure is sometimes reported with code 64505, but, in the absence of an actual injection, that code is incorrect. The American Medical Association recommends using an unlisted code 64999 to report this procedure.

It was mentioned that this service is reported by some providers with code 64505 along with the code for trigeminal block 64400.

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]. 7.01.159, 5/8/2017

Specialty Matched Consultant Advisory Panel 10/2017

Specialty Matched Consultant Advisory Panel 10/2018

BCBSA Medical Policy Reference Manual [Electronic Version]. 7.01.159, 11/8/2018

Specialty Matched Consultant Advisory Panel 10/2019

BCBSA Medical Policy Reference Manual [Electronic Version]. 7.01.159, 11/14/2019

Medical Director review 7/2020

Specialty Matched Consultant Advisory Panel 10/2020

BCBSA Medical Policy Reference Manual [Electronic Version]. 7.01.159, 11/12/2020

Specialty Matched Consultant Advisory Panel 10/2021

Specialty Matched Consultant Advisory Panel 10/2022

International Association for the Study of Pain (IASP). Global year against headache. https://www.iasp-pain.org/advocacy/global-year/headache/.

Singh A, Soares WE. Management strategies for acute headache in the emergency department. EmergMed Pract. Jun 2012; 14(6): 1-23; quiz 23-4. PMID 22830180

Headache Classification Committee of the International Headache Society (IHS) The International Classification of Headache Disorders, 3rd edition. Cephalalgia. Jan 2018; 38(1): 1-211. PMID 29368949

Sanders M, Zuurmond WW. Efficacy of sphenopalatine ganglion blockade in 66 patients suffering from cluster headache: a 12- to 70-month follow-up evaluation. J Neurosurg. Dec 1997; 87(6): 876-80. PMID9384398

American Migraine Foundation. Sphenopalatine Ganglion Blocks in Headache Disorders. 2016;https://americanmigrainefoundation.org/resource-library/sphenopalatine-ganglion-blocks/.

Specialty Matched Consultant Advisory Panel 10/2023

Medical Director Review 10/2023

Policy Implementation/Update Information

7/28/17 New policy developed. Sphenopalatine ganglion blocks are considered investigational for all indications, including but not limited to the treatment of migraines and non-migraine headaches. (sk)

8/24/18 Specialty Matched Consultant Advisory Panel review 10/25/2017. (sk)

11/9/18 Specialty Matched Consultant Advisory Panel review 10/24/2018. (sk)

1/29/19 Reference added. Biofeedback removed from list of Related Policies. (sk)

11/26/19 Specialty Matched Consultant Advisory Panel review 10/16/2019. (sk)

3/10/20 Reference added. (sk)

9/22/20 Medical Director review. Policy title changed from Sphenopalatine Ganglion Block for Headache to Injection Therapy for Headache (Migraine and Other) and Non-Spine Management. Description section updated. Related Policies added. Policy statements updated for clarity. When Not Covered section updated for clarity. Policy Guidelines updated. Codes 20605, 20606, 20999, 64400, 64405, 64408, 64415, 64417, 64418, 64420, 64421, 64450, 64454, 64455, 64505, 64999 added to Billing/Coding section. ICD-10 diagnosis codes added. Notification given 9/22/2020 for policy effective date 11/24/2020. (sk)

1/12/21 Specialty Matched Consultant Advisory Panel review 10/21/2020. ICD-10 diagnosis codes from M16 series, M17 series, M19 series, and M25 series removed from Billing/Coding section. (sk)

11/16/21 Reference added. Description section and Policy Guidelines updated. Specialty Matched Consultant Advisory Panel review 10/20/2021. (sk)

5/2/23 Policy Guidelines updated. Specialty Matched Consultant Advisory Panel review 10/19/2022. (sk)

9/29/23 Added the following ICD10 codes to the Billing/Coding section: G43.E01, G43.E09, G43.E11, and G43.E19, effective 10/1/2023. (ldh)

11/7/23 Minor edits to Description section. References updated. Updated ICD 10 code from R51 to R51.0 and R51.9 in the Billing/Coding section. Specialty Matched Consultant Advisory Panel review 10/2023. Medical Director review 10/2023. (ldh)