Tinnitus Treatment

Description of Procedure or Service

A variety of non-pharmacologic treatments are being evaluated to improve the subjective symptoms of tinnitus. These approaches include use of tinnitus maskers, electrical stimulation, transmeatal laser irradiation, electromagnetic energy, tinnitus-retraining therapy, cognitive and behavioral therapies, transcranial magnetic stimulation, transcutaneous electrical stimulation, sound therapy, and botulinum toxin A injections.

Tinnitus describes the perception of any sound in the ear in the absence of an external stimulus and presents a malfunction in the processing of auditory signals. A hearing impairment, often noise-induced or related to aging, is commonly associated with tinnitus. Clinically, tinnitus is subdivided into subjective and objective; the latter describes the minority of cases in which an external stimulus is potentially heard by an observer, for example by placing a stethoscope over the patient’s’ external ear. Common causes of objective tinnitus include middle ear and skull-based tumors, vascular abnormalities, and metabolic derangements. In the majority of cases, tinnitus is subjective and frequently self-limited. In a small subset of patients with subjective tinnitus, its persistence leads to disruption of daily life. While many patients habituate to tinnitus, others may seek medical care if the tinnitus becomes too disruptive.

Many treatments are supportive in nature, as currently, there is no cure. One treatment, called tinnitus masking therapy, has focused on use of devices worn in the ear that produce a broad band of continuous external noise that drowns out or masks the tinnitus. Psychological therapies may also be provided to improve coping skills, typically requiring 4 to 6 one-hour visits over an 18-month period. Tinnitus retraining therapy, also referred to as tinnitus habituation therapy, is based on the theories of a researcher named Jastreboff. Jastreboff proposes that tinnitus itself is related to the normal background electrical activity in auditory nerve cells, but the key factor in some patients’ unpleasant response to the noise is due to a spreading of the signal and an abnormal conditioned reflex in the extra-auditory limbic and autonomic nervous systems. The goal of tinnitus retraining therapy is to retrain the subcortical and cortical centers involved in processing the tinnitus signals and habituate the subcortical and cortical response to the auditory neural activity. In contrast to tinnitus masking, the auditory stimulus is not intended to drown out or mask the tinnitus, but is set at a level such that the tinnitus can still be detected. This strategy is thought to enhance extinction of the subconscious conditioned reflexes connecting the auditory system with the limbic and autonomic nervous systems by increasing the neuronal activity within the auditory system. Treatment may also include the use of hearing aids to increase external auditory stimulation.

Sound therapy is a treatment approach that is based on evidence of auditory cortex reorganization (cortical remapping) with tinnitus, hearing loss, and sound/frequency training. One type of sound therapy uses an ear-worn device (Neuromonics® Tinnitus Treatment, Neuromonics, Australia) pre-recorded with selected relaxation audio and other sounds spectrally adapted to the individual patient’s hearing thresholds. This is achieved by boosting the amplitude of those frequencies at which an
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audiogram has shown the patient to have a reduced hearing threshold. Also being evaluated is auditory tone discrimination training at or around the tinnitus frequency. Another type of sound therapy that is being investigated uses music with the frequency of the tinnitus removed (notched music) to promote reorganization of sound processing in the auditory cortex. The Heidelberg model uses an intensive program of active and receptive music therapy, relaxation with habituation to the tinnitus sound, and stress mapping with a therapist.

Transcutaneous electrical stimulation to the external ear has also been investigated and is based on the observation that the electrical stimulation of the cochlea associated with a cochlear implant may be associated with a reduction in tinnitus. Transmeatal low-power laser irradiation, electromagnetic energy, transcranial magnetic stimulation, and botulinum toxin A injections have also been evaluated.

The Neuromonics® Tinnitus Treatment has been cleared for marketing as a tinnitus masker through the Food and Drug Administration's (FDA) 510(k) process, and is “intended to provide relief from the disturbance of tinnitus, while using the system, and with regular use (over several months) may provide relief to the patient whilst not using the system.”

This policy does not address pharmacologic treatment of tinnitus, e.g., the use of amitriptyline or other tricyclic antidepressants.

Related Policies

Botulinum Toxin Injection

***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

BCBSNC will not provide coverage for treatment of tinnitus with tinnitus maskers, electrical stimulation, transmeatal laser irradiation, electromagnetic energy, tinnitus-retraining therapy, tinnitus coping therapy, transcranial magnetic stimulation, transcutaneous electrical stimulation, sound therapy, or botulinum toxin A injections. These treatment methods are considered investigational. BCBSNC does not cover investigational services.

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 tinnitus treatment is covered

Not applicable

When tinnitus treatment is not covered

Treatment of tinnitus with tinnitus maskers, electrical stimulation, transmeatal laser irradiation, electromagnetic energy, tinnitus-retraining therapy, tinnitus coping therapy, transcranial magnetic stimulation, transcutaneous electrical stimulation, sound therapy, or botulinum toxin A injections is considered investigational.

Policy Guidelines

Since tinnitus is a subjective symptom without a known physiologic explanation, randomized placebo-controlled trials are particularly important to validate the effectiveness of any treatment compared to the
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expected placebo effect.

A variety of treatments have been evaluated for the treatment of tinnitus. Cognitive and behavioral coping therapies have been reported to reduce tinnitus impairment and improve health-related quality of life. One large, well-conducted RCT using an intensive, multidisciplinary intervention showed improvement in outcomes, but it is uncertain if the intensive treatment approach used could be replicated outside of the investigational setting. Other RCT results suggest that a self-help/internet-based approach to cognitive and behavioral therapy (CBT) or acceptance and commitment therapy (ACT) may also improve coping skills. Additional studies are needed to determine the most effective method of delivering psychologic coping therapy outside of the investigational setting.

Current evidence is insufficient to show improved health outcomes in patients treated with tinnitus maskers, electrical stimulation, transmeatal laser irradiation, electromagnetic energy, tinnitus-retraining therapy, sound therapy, transcranial magnetic stimulation, transcutaneous electrical stimulation, or botulinum toxin A injections.

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: 92625

There are no specific CPT codes for electrical stimulation or tinnitus-retraining therapy. The CPT codes used may include evaluation and management CPT codes or possibly the physical medicine and rehabilitation code (97014) or speech therapy (92507). As tinnitus-retraining therapy in part involves counseling, an individual psychotherapy CPT code may be used (code range 90832-90838). Tinnitus-retraining therapy may also be billed as physical or speech therapy.

There is no specific CPT code for low-level laser therapy. However, providers may elect to use CPT code 97026, because the laser emits light in the infrared spectrum.

As described in the literature, electrical stimulation is an office-based procedure, but if self-administered by the patient, the device could possibly be described by HCPCS code E0720.

Tinnitus-masking devices represent a piece of durable medical equipment. There is currently no specific HCPCS code describing these devices.

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

MEDLINE Search - 11/99
BCBSA Medical Policy Reference Manual - 8/15/01. 8.01.39
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MEDLINE Search-6/2002


BCBSA Medical Policy Reference Manual, 8.01.39; 03/15/05.


**Policy Implementation/Update Information**

4/86 Evaluated: Investigational

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8/88 Reviewed: Investigational
1/99 Reaffirmed: Medical Advisory Group
7/99 Reformatted, Medical Term Definitions added.
7/00 Specialty Matched Consultant Advisory Panel. No changes to criteria.
9/00 Medical Policy Advisory Group review. Approved. No changes to criteria.
11/01 Coding Format Change.
6/02 Policy name changed from "Electrical Stimulation of the Ear for Suppression of Unremitting Tinnitus" to "Tinnitus Treatment". Expanded Description section to include additional information related to the treatment of tinnitus. Expanded Policy section to include tinnitus maskers, electrical stimulation or tinnitus-retraining therapy as investigational.
10/16/06 Description section revised to include electromagnetic energy, transcranial magnetic stimulation and botulinum toxin A injections. Under Policy and When Not Covered sections, added electromagnetic energy, transcranial magnetic stimulation and botulinum toxin A injections as investigational. Policy guidelines, reference sources, key words and terms and definitions added. Notice given 10/16/06. Effective date 12/18/06. (pmo)
6/22/10 Policy Number(s) removed. (amw)
7/6/2010 Description section updated. CPT Code 92625 added to Billing/Coding section. Also added information regarding appropriate coding for these services. Specialty Matched Consultant Advisory Panel review 5/24/10. No change to policy statement or coverage criteria. (adm)
9/13/11 Description section updated. The following were added to the list of non-covered treatments for tinnitus: tinnitus coping therapy, transcutaneous electrical stimulation and sound therapy. References updated. Specialty Matched Consultant Advisory Panel review 8/31/11. (adm)
9/4/12 Policy Guidelines updated. No change to coverage criteria. Specialty Matched Consultant Advisory Panel review 8/15/12. (sk)
1/1/13 CPT codes 90804-90809 replaced with CPT codes 90832-90838 in Billing/Coding Section. (sk)
7/1/15 Reference added. Related Policies added. Policy Guidelines updated. Medical Director review. No change to Policy statement. (sk)
11/12/13 Specialty Matched Consultant Advisory Panel review 8/21/13. No change to Policy guidelines. (sk)
7/15/14 Reference added. No change to Policy statement. (sk)
10/14/14 Reference added. Specialty Matched Consultant Advisory Panel review 9/30/14. No change to Policy guidelines. (sk)
7/1/15 Reference added. (sk)
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10/1/15  Specialty Matched Consultant Advisory Panel review 8/26/2015. (sk)

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.