



CIGNA MEDICAL COVERAGE POLICY

The following Coverage Policy applies to all health benefit plans administered by CIGNA Companies including plans formerly administered by Great-West Healthcare, which is now a part of CIGNA.

Subject Vestibular Rehabilitation and Particle Repositioning Maneuvers

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Hyperlink to Related Coverage Policies

Computerized Dynamic Posturography (CDP)
Transtympanic Micropressure Device for Ménière's Disease (e.g., Meniett™ Device)

INSTRUCTIONS FOR USE

Coverage Policies are intended to provide guidance in interpreting certain **standard** CIGNA HealthCare benefit plans. Please note, the terms of a customer's particular benefit plan document [Group Service Agreement (GSA), Evidence of Coverage, Certificate of Coverage, Summary Plan Description (SPD) or similar plan document] may differ significantly from the standard benefit plans upon which these Coverage Policies are based. For example, a customer's benefit plan document may contain a specific exclusion related to a topic addressed in a Coverage Policy. In the event of a conflict, a customer's benefit plan document **always supercedes** the information in the Coverage Policies. In the absence of a controlling federal or state coverage mandate, benefits are ultimately determined by the terms of the applicable benefit plan document. Coverage determinations in each specific instance require consideration of 1) the terms of the applicable benefit plan document in effect on the date of service; 2) any applicable laws/regulations; 3) any relevant collateral source materials including Coverage Policies and; 4) the specific facts of the particular situation. Coverage Policies relate exclusively to the administration of health benefit plans. Coverage Policies are not recommendations for treatment and should never be used as treatment guidelines. In certain markets, delegated vendor guidelines may be used to support medical necessity and other coverage determinations. Proprietary information of CIGNA. Copyright ©2011 CIGNA

Coverage Policy

Particle Repositioning Maneuvers

CIGNA covers up to three (3) visits of particle repositioning maneuvers (e.g., Epley canalith maneuver or Semont maneuver) per episode as medically necessary for the treatment of benign paroxysmal positional vertigo (BPPV).

CIGNA does not cover particle repositioning maneuvers for any other indication because it is considered not medically necessary.

Vestibular Rehabilitation

Under many benefit plans, coverage for vestibular rehabilitation is subject to the terms, conditions and limitations of the applicable benefit plan's Short-Term Rehabilitative Therapy benefit and as described in the schedule of copayments. Please refer to the applicable benefit plan document to determine benefit availability and the terms, conditions and limitations of coverage.

Outpatient vestibular rehabilitation is the most medically appropriate setting for these services unless the individual independently meets coverage criteria for a different level of care.

Many benefit plans have exclusion language and/or limitations that impact coverage of vestibular rehabilitation, including any or all of the following:

- **A maximum allowable benefit for duration of treatment or number of visits. When this is present and the maximum allowable benefit is exhausted, coverage will no longer be provided even if the medical necessity criteria described below are met.**
- **Specific coverage exclusions for maintenance or preventive care consisting of routine, long-term, or non-medically necessary care provided to prevent recurrences or to maintain the member's current status.**

If coverage is available for vestibular rehabilitation, the following conditions of coverage apply.

CIGNA covers a vestibular rehabilitation evaluation as medically necessary for the assessment of vertigo.

CIGNA covers vestibular rehabilitation, vestibular exercise or balance retraining as medically necessary for the treatment of vertigo when ALL of the following medical necessity criteria have been met:

- vestibular lesions are stable, resulting in symptoms that are vestibular in origin and can be reliably reproduced
- symptoms interfere with activities of daily living
- failure of medical management

CIGNA does not cover particle repositioning maneuvers or vestibular rehabilitation, vestibular exercise or balance retraining for any other indication because each it is considered not medically necessary.

General Background

Vertigo is defined as the illusory sensation of motion, either of the body or of the surrounding environment, occurring while an individual is stationary. It is often associated with a feeling of spinning, nausea, emesis and diaphoresis. Sudden simple movements or change of posture may provoke vertigo, which can be accompanied by disequilibrium. The condition of vertigo can arise from disturbances in the vestibular system, central nervous system (brainstem or cerebellum) or cardiovascular system, or it can be idiopathic or psychological in origin. Lesions of the vestibular system may result in pathologic vertigo.

Conditions associated with peripheral vertigo include benign paroxysmal positional vertigo (BPPV), Ménière's disease, acoustic neuroma, labyrinthitis, and vestibular neuronitis. Benign paroxysmal positional vertigo (BPPV), a disorder of the inner ear labyrinth, is one of the most common forms of vestibular positional vertigo. BPPV is characterized by positional vertigo and positional nystagmus (i.e., repeated, rhythmic oscillations of the eye), which occur when the head moves in certain directions or positions. Although BPPV can occur following head trauma, head surgery, viral labyrinthitis or stapes surgery, it is most often idiopathic in nature. BPPV typically involves a single semicircular canal, usually posterior, but may involve both posterior and lateral canals in the same inner ear (Parnes, et al., 2003). The attacks generally last fewer than 30 seconds, but may last several minutes. In most cases, the condition resolves spontaneously within a few weeks or months after onset; in some cases, however, symptoms may become protracted.

Vertigo associated with Ménière's disease differs from BPPV in that the vertigo occurs spontaneously, lasts for minutes to hours and is accompanied by unilateral hearing loss and tinnitus. Although the pathophysiology is not completely understood, Ménière's disease has been linked to damage to the labyrinth from viral labyrinthitis. Vestibular neuronitis is thought to be a disease that is viral in origin, affecting the vestibular division of the eighth cranial nerve. Acoustic neuroma is usually associated with a progressive unilateral deafness and tinnitus.

The two primary tests of vestibular dysfunction are caloric testing and rotational testing. The vestibular function tests include: spontaneous nystagmus, including gaze nystagmus; positional nystagmus; caloric vestibular testing; optokinetic nystagmus testing; oscillating tracking test; and sinusoidal vertical axis rotational testing.

Electronystagmography (ENG) is employed in many of these tests, where the differences in electrical potentials around the eyes is measured and recorded during nystagmus. The principle of the vestibule-ocular reflex (VOR) is applied in the indirect measurement of vestibular function. Many of these tests are nonspecific and cannot identify the underlying pathology.

The standard of care for the definitive diagnosis of BPPV is a provocative test, the Dix-Hallpike test, which is based on the theory of canalolithiasis. A Dix-Hallpike test is considered positive for BPPV if the maneuver provokes paroxysmal vertigo and nystagmus. The two approaches used in the treatment of patients with vestibular disorders are particle repositioning maneuvers and vestibular rehabilitation, also referred to as vestibular exercise therapy or balance retraining. The primary aim of particle repositioning maneuvers, such as the Epley canalith procedure, is to treat the underlying pathology causing the symptoms. Vestibular rehabilitation programs follow the compensatory and adaptive models, rather than the restorative approach, teaching and training patients to adapt to their vestibular dysfunction and increasing the tolerance level to the vertigo through a series of exercises.

Particle Repositioning Maneuvers

The current standard of care for treating the underlying cause of BPPV is based on a maneuver first introduced by Epley. Canalith repositioning, as described by Epley, is a series of rotational maneuvers thought to clear the offending particles (i.e., canaliths) out of the semicircular canals (Epley, 1992). Unlike vestibular exercise therapy interventions, particle repositioning maneuvers treat the underlying pathology of BPPV.

The Epley maneuver, also called the canalith repositioning maneuver, involves a five-position cycle in which the patient undergoes a series of timed head maneuvers. The cycle is repeated until no nystagmus is observed during any of the position changes or until a total of five cycles has been completed. In general, resolution of symptoms occurs within one to two treatments. It should be noted, however, that the majority of studies report success rates of 75% or greater after just a single treatment. Mastoid vibration using a bone conduction vibrator may or may not be used during the procedure.

The Semont maneuver, also called the liberatory maneuver, involves moving the seated patient quickly from sitting to lying with the affected ear down, then quickly over so that the other ear is down, and then back to a sitting position. This maneuver requires abrupt head movements, making it more difficult to perform and potentially more uncomfortable for the patient than the Epley maneuver.

Literature Review for Particle Repositioning Maneuvers: Evidence in the peer-reviewed medical literature evaluating the use of particle repositioning maneuvers exists in the form of a systematic review, a meta-analysis, randomized controlled trials (RCTs) and case series (Helminski, et al., 2010; Munoz, et al., 2007; Von Brevern, et al., 2006; Prokopakis, et al., 2005; White et al. 2005; Salvaneli, et al., 2004; Angeli, et al., 2003, ECRI, 2003), with the majority of the studies evaluating the Epley canalith maneuver. The reported success rates range from 44–90%, with several studies reporting no effect. Epley's initial study in 1992 noted an 80% success rate after a single treatment and 100% success when more than one treatment session was involved. Subsequent open, clinical trials report more widely varying success rates. Outcome measures used in studies have included self-reported resolution of symptoms and the presence or absence of positional nystagmus, demonstrated through follow-up Dix-Hallpike testing.

The scientific literature contains supportive evidence that particle repositioning maneuvers, such as the Epley canalith and Semont maneuvers, are safe and effective for the treatment of patients with BPPV. Insufficient evidence exists in the scientific literature to support the use of particle repositioning maneuvers for conditions other than BPPV.

The value of applying concurrent mastoid vibration remains controversial, and there is no consensus on its role in particle repositioning procedures. Li et al. (1995) advocated the use of a vibratory stimulus applied to the mastoid of the affected ear to facilitate the movement of the particle. Reported success rates for the treatment, however, were no different than those from studies which did not include mastoid vibration during treatment. Motamed et al. (2004) in a prospective randomized study and Hain et al. (2000) in a retrospective case review obtained similar results which demonstrated that the concurrent use of mastoid vibration with the canalith repositioning procedure does not affect the outcome.

Vestibular Rehabilitation/Vestibular Exercise Therapy/Balance Retraining

The second approach used to treat vestibular disorders is vestibular rehabilitation, also referred to as vestibular exercise therapy or balance retraining. Physical or occupational therapists provide these rehabilitation programs using a custom-designed series of training exercises. Vestibular rehabilitation is often used in the treatment of patients with chronic balance disorders other than BPPV, such as neuronitis, labyrinthitis, Ménière's disease, and acoustic neuroma. Studies have suggested that patients with conditions that demonstrate fluctuating symptoms, such as Ménière's disease, and conditions that exhibit spontaneous vertigo will experience poorer outcomes from a program of vestibular exercise therapy than those with stable deficits and positional vertigo. During the evaluation process, specific functional deficits related to motion-provoked symptoms or abnormalities in gait or postural control are assessed.

Training exercises taught during vestibular rehabilitation programs are aimed at reducing or eliminating motion-provoked and/or positional sensitivity. These exercises include gait and balance training, training in activities of daily living, and generalized conditioning. This approach does not treat the underlying cause of the symptoms. In general, a vestibular rehabilitation program consists of a six-week course of training exercises performed two to three times per week.

Literature Review for Vestibular Rehabilitation/Vestibular Exercise Therapy/Balance Retraining:

Evidence in the published, peer-reviewed scientific literature evaluating the efficacy of vestibular rehabilitation consists of a RCTs and case series. An RCT by Giray et al. (2009) evaluated patients (n=42) with chronic unilateral vestibular dysfunction. Significant improvements ($p<0.05$) were reported in symptoms, disability, balance and postural stability for the group of subjects who received vestibular rehabilitation compared to those who had no rehabilitation.

A Cochrane review (n=21 trials; 1383 subjects) by Hillier et al. (2007) reported on the effectiveness of vestibular rehabilitation for symptomatic unilateral peripheral vestibular dysfunction associated with a variety of conditions including BPPV, and Ménière's (non-acute phase). It was found that there was moderate to strong evidence that vestibular rehabilitation for the general diagnosis of unilateral peripheral vestibular disorders was safe and effective.

Multiple RCTs and case series (Verecek, et al., 2008; Gottshall, et al., 2005; Enticott, et al., 2005; Cohen and Kimball, 2004; Strupp, et al., 1998; Yardley et al. (1998) have demonstrated that vestibular exercises results in improvement of symptoms caused by vestibular dysfunction. Limitations noted in the available studies include small sample sizes, wide variation in type, frequency and duration of treatment used, lack of randomization.

The overall body of evidence in the scientific literature suggests that vestibular rehabilitation, vestibular exercise therapy, and balance retraining may benefit patients with all of the following:

- stable lesions whose symptoms are vestibular in origin and can be reliably reproduced
- failed treatment with medications
- symptoms that interfere with activities of daily living

The use of vestibular rehabilitation for conditions in which postural changes or body movements do not reliably provoke the sensation of dizziness is not supported in the published, peer-reviewed scientific literature.

Professional Societies/Organizations

In November 2008, a guideline on BPPV was issued by the American Academy of Otolaryngology-Head and Neck Surgery (AOHNS) Foundation. Based on relatively high-quality evidence the guideline panel recommended that clinicians should treat patients with posterior canal BPPV with a particle repositioning maneuver, as this treatment consistently eliminates the vertigo due to BPPV, improves quality of life, and reduces the risks of falling (Bhattacharyya, et al., 2008).

In May 2008, the American Academy of Neurology (AAN), in an evidence based review of therapies for BPPV, found strong evidence to support the use of canalith repositioning procedures as a safe and effective therapy for patients with posterior semicircular canal BPPV. The AAN reported weak evidence to support the effectiveness of the Semont maneuver for BPPV. It was also reported that mastoid oscillation is probably of no added benefit to patients treated with canalith repositioning procedures for posterior canal BPPV (AAN, 2008).

Summary

The supportive evidence in the peer-reviewed scientific literature is strong regarding the use of particle repositioning maneuvers for the treatment of benign paroxysmal positional vertigo (BPPV) and moderate regarding the use of vestibular rehabilitation in the treatment of patients with stable lesions whose symptoms are vestibular in origin and can be reliably reproduced, who have failed treatment with medications, and whose symptoms interfere with activities of daily living.

Coding/Billing Information

Note: This list of codes may not be all-inclusive.

Covered when medically necessary and when used to report particle repositioning maneuvers:

CPT ^{®*} Codes	Description
95992	Canalith repositioning procedure(s), (eg, Epley maneuver, Semont maneuver), per day

ICD-9-CM Diagnosis Codes	Description
386.11	Benign paroxysmal positional vertigo

Covered when medically necessary and used to report vestibular rehabilitation:

HCPCS Codes	Description
S9476	Vestibular rehabilitation program, non-physician provider, per diem

ICD-9-CM Diagnosis Codes	Description
225.1	Benign neoplasm of cranial nerves
386.00- 386.03	Menière's disease
386.10-386.9	Other and unspecified peripheral vertigo
386.2	Vertigo of central origin
386.30- 386.35	Labyrinthitis
386.40- 386.48	Labyrinthine fistula
386.50- 386.58	Labyrinthine dysfunction
386.8	Other disorders of labyrinth
386.9	Unspecified vertiginous syndromes and labyrinthine disorders
388.5	Disorders of acoustic nerve
780.4	Dizziness and giddiness

Not Medically Necessary/Not Covered:

ICD-9-CM Diagnosis Codes	Description
	All other codes

*Current Procedural Terminology (CPT[®]) © 2010 American Medical Association: Chicago, IL.

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Policy History

Pre-Merger Organizations	Last Review Date	Policy Number	Title
CIGNA HealthCare	1/15/2008	0021	Vestibular Rehabilitation and Particle Repositioning Maneuvers

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