Management of Vertigo and Tinnitus Symptoms
Nomination Summary Document

Results of Topic Selection Process & Next Steps

- Management of tinnitus symptoms was found to be addressed by an in-process AHRQ Effective Health Care (EHC) Program review titled *Evaluation and Treatment of Tinnitus*.
  - To view a description and status of the research review, please go to: http://www.effectivehealthcare.ahrq.gov/index.cfm/search-for-guides-reviews-and-reports/.
  - To sign up for notification when this and other EHC Program topics are posted, please go to: http://effectivehealthcare.ahrq.gov/index.cfm/join-the-email-list1/.

- Management of vertigo symptoms was found to be addressed by multiple guidelines and reviews on the treatment of benign paroxysmal positional vertigo, Ménière’s disease, and vestibular neuritis. Given that the existing and in-process reviews and guidelines cover this nomination, no further activity will be undertaken on this topic.
http://summaries.cochrane.org/CD008234/intratympanic-gentamicin-for-menieres-disease-or-syndrome


**Topic Description**

**Nominator:** Individual

**Nomination Summary:** The nominator is interested in management of symptoms of tinnitus and vertigo.

**Staff-Generated PICO: Tinnitus**

**Population(s):** Adult patients with a diagnosis of subjective tinnitus

**Intervention(s):** Medical/surgical treatments (e.g., pharmacological treatments, laser treatments, complementary and alternative therapies), sound treatments/technologies (e.g., hearing aids, tinnitus retraining therapy), psychological/behavioral interventions (e.g., cognitive behavioral therapy, biofeedback), combination therapies

**Comparator(s):** Placebo, no treatment, comparison to other treatments

**Outcome(s):** Symptom improvement, sleep disturbance, discomfort, anxiety, depression, quality of life, surgical complications

**Staff-Generated PICO: Benign paroxysmal positional vertigo**

**Population(s):** Patients with benign paroxysmal positional vertigo

**Intervention(s):** Vestibular suppressant medication (e.g., betahistine hydrochloride, prochlorperazine), canalith repositioning maneuvers, vestibular rehabilitation exercises, surgical treatment

**Comparator(s):** Comparative effectiveness of above interventions, placebo or observation
Outcome(s): Persistence of vertigo attacks, improvement in vertigo symptoms, functional impairment and quality of life, complications of treatment

Staff-Generated PICO: Ménière's disease
Population(s): Patients with Ménière's disease
Intervention(s): Anticholinergic drugs, benzodiazepines, vestibular suppressant medications, antihistamines, diuretics, vasodilators, dietary modifications, psychological support, vestibular rehabilitation, surgery, Meniette device
Comparator(s): Comparative effectiveness of above interventions, placebo, or observation
Outcome(s): Persistence of vertigo attacks, improvement in vertigo symptoms, functional impairment and quality of life, complications of treatment

Staff-Generated PICO: Vestibular neuritis
Population(s): Patients with vestibular neuritis
Intervention(s): Antiviral medications, corticosteroids
Comparator(s): Comparative effectiveness of above interventions, placebo, or observation
Outcome(s): Persistence of vertigo attacks, improvement in vertigo symptoms, functional impairment and quality of life, complications of treatment

Key Questions from Nominator: None

Considerations

- The topic meets EHC Program appropriateness and importance criteria. (For more information, see http://effectivehealthcare.ahrq.gov/index.cfm/submit-a-suggestion-for-research/how-are-research-topics-chosen/.)

- Because vertigo is a symptom rather than a clinical diagnosis and may be due to a variety of underlying etiologies requiring different treatments, evaluation of this nomination focused on the most common underlying etiologies of vertigo. Therefore, this topic has four main areas:

  1. Management of tinnitus symptoms
  2. Management benign paroxysmal positional vertigo (BPPV) symptoms
  3. Management of Ménière’s disease symptoms
  4. Management of vestibular neuritis symptoms

- The management of tinnitus symptoms was found to be addressed by an in-process AHRQ EHCP Program review titled Evaluation and Treatment of Tinnitus. Key questions include:

  1. In patients with symptoms of tinnitus (e.g., ringing in the ears, whooshing sounds, etc.) what is the comparative effectiveness of methods used to identify patients for further evaluation or treatment?
2. In adults with subjective idiopathic (nonpulsatile) tinnitus, what is the comparative effectiveness (and/or potential harms) of medical/surgical, sound treatment/technological, or psychological/behavioral intervention (including combinations of interventions)?

3. For adults with subjective idiopathic tinnitus, what prognostic factors, patient characteristics, and/or symptom characteristics affect final treatment outcomes?

- The management of BPPV was found to be addressed by clinical practice guidelines from the American Academy of Neurology and the American Academy of Otolaryngology- Head and Neck Surgery that broadly address management strategies for BPPV. In addition, this topic was found to be addressed by three Cochrane reviews titled *Vestibular rehabilitation for unilateral peripheral vestibular dysfunction*, *The Epley (canalith repositioning) manoeuvre for benign paroxysmal positional vertigo*, and *Modifications of the Epley (canalith repositioning) manoeuvre for posterior canal benign paroxysmal positional vertigo (BPPV)*.

- The management of Ménière’s disease was found to be addressed by a 2007 BMJ Clinical Evidence review that broadly examined the available management strategies for Ménière’s disease. In addition, this topic was found to be addressed by seven Cochrane reviews titled *Vestibular rehabilitation for unilateral peripheral vestibular dysfunction*; *Intratympanic gentamicin for Ménière's disease or syndrome*; *Intratympanic steroids for Ménière's disease or syndrome*; *Surgery for Ménière's disease*; *Betahistine for Ménière's disease or syndrome*; and *Diuretics for Ménière's disease or syndrome*; and *Positive pressure therapy for Ménière's disease or syndrome*.

- The management of vestibular neuritis was found to be addressed by two Cochrane reviews titled *Vestibular rehabilitation for unilateral peripheral vestibular dysfunction* and *Corticosteroids for the treatment of idiopathic acute vestibular dysfunction (vestibular neuritis)*.