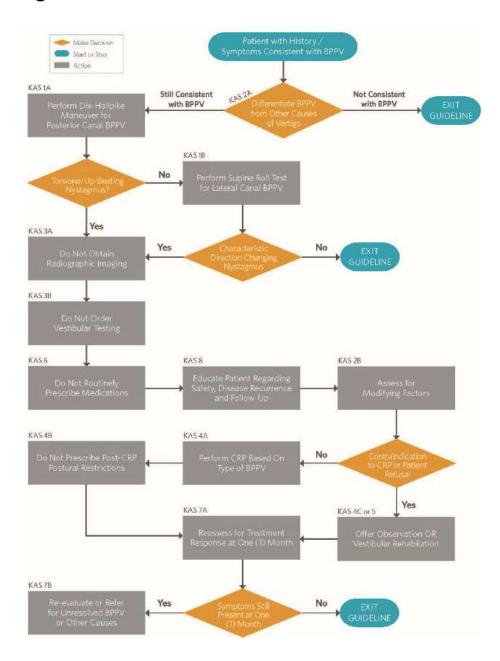


Clinical Pathways Program

# Clinical Guideline: Benign Paroxysmal Positional Vertigo (BPPV), Outpatient

Updated: November 2, 2020

## **Clinical algorithm:**



## Clinical guideline summary

**CLINICAL GUIDELINE NAME:** Benign Paroxysmal Positional Vertigo (BPPV)

PATIENT POPULATION AND DIAGNOSIS: Adults with suspected or confirmed BPPV

**APPLICABLE TO:** All Spectrum Health sites

#### **BRIEF DESCRIPTION:**

BPPV is considered the second most common etiology, and the most common ear etiology, of complaints of dizziness/vertigo, comprising 17-42% of all vertigo diagnoses. Since 2008, and with a recent a 2017 update, there has been a Clinical Practice Guideline put forth by the American Academy of Otolaryngology (AAO) to guide the multitude of clinic types and healthcare personnel that encounter patients with this condition. This guideline is also endorsed by many other physician and non-physician professional organizations. For as common BPPV is to many primary and specialty care outpatient offices, Urgent Care and Emergency Department, and Outpatient Rehab facilities, there does not appear to be uniformity to how health care systems evaluate and treat this condition.

BPPV notoriously goes undiagnosed, misdiagnosed, or confused for another condition, even considering its common occurrence in the adult population. Historically speaking, provider presumptions regarding this condition and over reliance on sub-optimal medication had had a large impact on health care systems and utilization. Ultimately, this leads to an asymmetric amount of office visits and medical dollars spent by patients to arrive at a proper diagnosis and optimal treatment of BPPV. In estimates, it takes roughly \$2000 for an individual to arrive at a diagnosis of BPPV. This equates to almost \$2 billion in yearly health care costs as many patients receive a delay in diagnosis on the order of months.

The AAO guideline cites a study which "reported that 70% of patients with BPPV will undergo magnetic resonance imaging scanning, 45% will have a computed tomography scan, and 41% will have an electrocardiogram, while 53% will be treated with medications". The authors conclude the Guideline by stating "Therefore, significant improvements in the diagnosis and treatment of patients with BPPV may lead to significant health care quality improvements as well as medical and societal cost savings".

This guideline provides a clinical algorithm to guide a provider in evidence-based steps to properly identify BPPV and with recommendations for treatment as well as recommendations against clinical pitfalls that lead to the previously stated health care burden (imaging, medications, etc).

It is the authors' experience that despite being a well-known condition, and with a formal multiprofessional guideline already developed, many offices recommend and document management strategies for BPPV that are specifically recommended against in the guideline (primarily in the form of over-reliance on CT imaging and overuse of vestibular suppressant medication). SHWM is currently organized in a way that a system wide philosophy change in management of BPPV can have unfathomable benefits.

**OVERSIGHT TEAM LEADER(S):** Mike Hojnacki AuD; Maureen Gaynor, MPT; Michele Weaver DPT

#### OWNING EXPERT IMPROVEMENT TEAM (EIT): N/A

MANAGING CLINICAL PRACTICE COUNCIL (CPC): Specialty Health

**OTHER TEAM(S) IMPACTED** (FOR EXAMPLE: CPCs, ANESTHESIA, NURSING, RADIOLOGY): Any primary or specialty care outpatient office, Urgent Care and ED receiving patients with the primary complaint of dizziness/vertigo

#### **IMPLEMENTATION DATE:**

LAST REVISED:

FOR MORE INFORMATION, CONTACT: Mike Hojnacki, AuD

## Clinical pathways clinical approach

#### TREATMENT AND MANAGEMENT:

Below are key statements (some omitted for brevity) which may not clearly realized/followed across the system. This is from the summary of the AAO Guideline Key Action Statements: Bhattacharyya et al. Clinical Practice Guideline: Benign Paroxysmal Positional Vertigo (Update) Executive Summary Otolaryngology–Head and Neck Surgery 2017, Vol. 156(3) 403–416

- 1a. Diagnosis of posterior semicircular canal BPPV Clinicians should diagnose posterior semicircular canal BPPV when vertigo associated with torsional, up beating nystagmus is provoked by the Dix-Hallpike maneuver. The maneuver should be repeated with the opposite ear down if the initial maneuver is negative. STRONG RECOMMENDATION.
- 2a. Differential diagnosis Clinicians should differentiate, or refer to a clinician who can differentiate, BPPV from other causes of imbalance, dizziness, and vertigo.

  RECOMMENDATION
- 3a. Radiographic testing Clinicians should not obtain radiographic imaging in a patient who meets diagnostic criteria for BPPV in the absence of additional signs and/or symptoms inconsistent with BPPV that warrant imaging. RECOMMENDATION AGAINST
- 3b. Vestibular testing Clinicians should not order vestibular (audiology) testing in a patient who meets diagnostic criteria for BPPV in the absence of additional vestibular signs and/or symptoms inconsistent with BPPV that warrant testing. RECOMMENDATION AGAINST
- 4a. Repositioning procedures as initial therapy Clinicians should treat, or refer to a clinician who can treat, patients with posterior canal BPPV with a canalith repositioning procedure. STRONG RECOMMENDATION

- 5. Vestibular Rehabilitation The clinician may offer vestibular rehabilitation, either self-administered or with a clinician, in the treatment of BPPV. OPTION (though would be the ideal referral when offering BPPV treatment in 4a when not provided by original examining provider)
- 6. Medical therapy Clinicians should not routinely treat BPPV with vestibular suppressant medications such as antihistamines and/or benzodiazepines. RECOMMENDATION AGAINST

### References:

Neil Bhattacharyya, MD et al. Clinical Practice Guideline: Benign Paroxysmal Positional Vertigo (Update) Executive Summary Otolaryngology—Head and Neck Surgery 2017, Vol. 156(3) 403–416. American Academy of Otolaryngology—Head and Neck Surgery Foundation 2017