



IEHP UM Subcommittee Approved Authorization Guideline			
<b>Guideline</b>	Vestibular Autorotation Test (VAT)	<b>Guideline #</b>	UM_DIA 15
		<b>Original Effective Date</b>	8/13/2014
<b>Section</b>	Diagnostic	<b>Revision Date</b>	12/15/2021

### COVERAGE POLICY

Based on a review of the currently available literature, there is insufficient evidence to support the use of VAT (Vestibular Autorotation Test) in the diagnosis or management of vestibular disorders or other disorders affecting balance and coordination. The IEHP UM Subcommittee considers this procedure experimental and investigational because its sensitivity, specificity, reproducibility, and clinical utility have not been demonstrated.

### COVERAGE LIMITATIONS AND EXCLUSIONS

N/A

### ADDITIONAL INFORMATION

Impairment of the vestibular-ocular reflex (VOR) may result in chronic dizziness and imbalance. The vestibular autorotation test (VAT) is a high-frequency, active head rotation (AHR) test to subjectively evaluate the VOR and its function. Patients wear a light-weight head-strap with a velocity sensor on the back. They follow instructions to shake their head, first side-to-side, and then up-and-down. Conventional electro-oculogram electrodes placed around the eyes measure patient's eye movements.

Although some published studies have suggested that the VAT may be useful in evaluating patients with vestibular disorders/diseases, there are few studies that examined the sensitivity and specificity of the VAT in evaluating patients with suspected vestibular abnormalities. Furthermore, there is a lack of data supporting the value of VAT in the management of patients with vestibular disorders/diseases.

An analysis of the diagnostic utility of the vestibular autorotation test was retired by the American Academy of Neurology. Instead, practice guidelines reviewed cervical and ocular vestibular evoked myogenic potentials (VEMP) which refer to myogenic potentials recorded by surface electromyogram (EMG) electrodes. In ocular VEMP (oVEMP), electrodes beneath both eyes record myogenic potentials in response to bone-conducted vibration of the head or air conducted sound. In cervical VEMP (cVEMP), vestibular-evoked myogenic potentials are recorded by surface EMG electrodes over the sternocleidomastoid muscles. Evidence is insufficient to determine whether cVEMP or oVEMP is useful in diagnosing some causes of dizziness and imbalance such as vestibular neuritis or Meniere's disease. It has not been demonstrated that cVEMP substantively aids in diagnosing benign paroxysmal positional vertigo or that cVEMP or oVEMP aids in diagnosing/managing vestibular migraine.

## CLINICAL/REGULATORY RESOURCE

### **Medicare:**

Medicare does not have a National Coverage Determination (NCD) or a Local Coverage Determination (LCD) for VAT.

### **Medi-Cal:**

There are no Medi-Cal guidelines regarding VAT.

### **Apollo Medical Review Criteria :**

VAT is not listed as a procedure commonly used to test vestibular function but is listed as an Aetna Health Plan Policy.

### **Aetna :**

Aetna considers vestibular autorotation test (VAT) experimental and investigational for the diagnosis of individuals with vestibular disorders or any other indications because its sensitivity, specificity, reproducibility, and clinical utility have not been demonstrated.

### **MCG**

No guidelines were found for VAT.

## DEFINITION OF TERMS

N/A

## REFERENCES

1. Aetna Medical Clinical Policy Bulletin 0467.2021. Vestibular Autorotation Test (VAT). [http://www.aetna.com/cpb/medical/data/400\\_499/0467.html](http://www.aetna.com/cpb/medical/data/400_499/0467.html). Accessed December 9, 2021.
2. Apollo Medical Review Criteria Guidelines for Managing Care, 20<sup>th</sup> edition, 2021. ENT 192 Vestibular Function Testing.
3. Curthoys, IS, V Vulovic and L Manzari. 2012. Ocular vestibular-evoked myogenic potential (oVEMP) to test utricular function: neural and ocularmotor evidence. *Acta Otorhinolaryngol Ital*, 32(1): 41-45.
4. Fife, Terry D, James G Colebatch, Kevin A Kerber, Krister Brantberg, Michael Strupp, Hyung Lee, Mark F Walker, Eric Ashman, Jeffrey Feltcher, Brian Callaghan, David S Gross. 2017. Practice guideline: Cervical and ocular vestibular evoked myogenic potential testing. Report of the Guideline Development, Dissemination, and Implementation Subcommittee of the American Academy of Neurology. 89(22): 2288-2296.

**DISCLAIMER**

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