

# Benign Paroxysmal Vertigo of Childhood

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## Provider Fact Sheet

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## Overview

Benign Paroxysmal Vertigo of Childhood (BPVC) is characterized by paroxysmal recurrent attacks of subjective or objective vertigo occurring in otherwise healthy children.<sup>1</sup> It is the number one cause of dizziness in children between the ages of 2 and 6 years.<sup>2</sup> The attacks occur spontaneously and usually without warning. The mean age of onset is 2-4 years and 7-11 years of age, with a higher prevalence in females. Episodes last from 1-5 minutes with frequency being 2-10 episodes per month<sup>3,2,4,1</sup>. The episodes may be triggered by fatigue, nutrition, stress, travel, climate change, and lack of sleep.<sup>1</sup> Family history of migraines, symptoms of headaches, and motion sickness have additionally been observed in children with BPVC<sup>5,6,7,8,9</sup>. Vestibular function testing is largely normal with evidence of bilateral hyperreflexia, unilateral hyperreflexia, or unilateral or bilateral deficits<sup>5</sup>.

The pathogenesis for BPVC is unknown with theories including both peripheral and central dysfunction of the vestibular system. A migraine precursor is the most commonly accepted theory due to family history of migraines.

More recently, the Classification Committee of Vestibular Disorders of the Bárány Society and the International Headache Society suggested that the terminology for Benign Paroxysmal Vertigo of Childhood be replaced by the following disorders “Vestibular Migraine of Childhood”, “probable Vestibular Migraine of Childhood” and “Recurrent Vertigo of Childhood”<sup>10</sup>. See separate fact sheets on these diagnoses.

## Diagnosis

Diagnosis of BPVC is based on the criteria established by the Headache Classification Committee of the International Headache Society listed below.

Diagnostic Criteria (ICDH-3 beta)

- A. At least 5 attacks, fulfilling criteria B and C
- B. Vertigo occurring without warning, maximal at onset, and resolving spontaneously after minutes to hours without loss of consciousness
- C. At least one of the following associated symptoms
  - a. Nystagmus
  - b. Ataxia
  - c. Vomiting
  - d. Pallor
  - e. Fearfulness

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- D. Normal neurological examination and audiometric and vestibular function between attacks
- E. Not attributed to another disorder

(Headache Classification Committee of the International Headache Society. The international Classification of Headache Disorders, 3<sup>rd</sup>. edition (beta version). Cephalgia. 2013; 33: 653-655, 794-79(6629-808)

## Treatment

BPVC resolves spontaneously between the ages of 5-8 years. Since the episodes are brief, no medications are recommended for treatment. Dietary guidance alone or in conjunction with vestibular rehabilitation have shown some improvements in symptoms<sup>5</sup>. A child also presenting with balance impairments and/or gross motor developmental delay may benefit from intervention with a physical therapist.

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