

Benign paroxysmal positional vertigo

## New epidemiological findings on benign paroxysmal positional vertigo

H S Cohen

Benign paroxysmal positional vertigo is associated with a range of factors, some previously unknown

In this issue of *JNNP*, von Brevern and colleagues<sup>1</sup> describe an excellent population based survey of benign paroxysmal positional vertigo (BPPV) that represents a turnaround in our understanding of the disorder (*see page 710*). One hundred years ago, BPPV was unknown; even in the 1950s and 1960s, most specialists were not aware of it (Bobby R Alford, personal communication). The development of non-invasive, easily used and highly effective "repositioning" exercises and manoeuvres<sup>2-3</sup> has prompted increased interest in BPPV. The many papers in the literature since 1990 suggest that the disorder is now widely recognised, which is fortunate because von Brevern *et al*<sup>1</sup> show that BPPV is fairly common in the population. Despite recent advances and increased interest by many investigators, however, questions still remain.

von Brevern *et al*<sup>1</sup> describe initial age of onset in middle age and increasing incidence with advancing age, so that the prevalence is high in the elderly population. Their description of a disappointingly low

rate of appropriate diagnostic testing and treatment for BPPV indicates the need for better training about vertigo for primary care and specialty physicians, as well as nurse practitioners, occupational therapists and physical therapists who support specialty care practices, particularly practices with older adults.

Most studies of BPPV, using convenience samples of patients who present themselves for care at academic medical centres, show approximately twice as many female as male patients. This might be considered an artefact of the recruitment procedures in clinical studies but for a similar finding by von Brevern *et al*.<sup>1</sup> They suggest that history of migraine, which is also more common in females, explains the finding. Many women do not have migraine but do have BPPV, so other factors are probably involved. Further research is needed to learn why it is more common in women and to elucidate the relationship among comorbid factors and BPPV.

The population of patients with BPPV may be composed of several subgroups

with different pathophysiologies, such as head trauma, viral labyrinthitis, vestibular neuronitis and age related changes in otoconia,<sup>4-6</sup> as well as migraine. von Brevern *et al*<sup>1</sup> report previously unknown relationships to hyperlipidaemia, hypertension and stroke. Perhaps some of these comorbid conditions, and others previously reported in the literature, have some common underlying causes. For example, intubation, diabetes and advanced age may all cause microvascular changes that may affect the peripheral vestibular pathways. This important study should spur future research into these problems.

*J Neurol Neurosurg Psychiatry* 2007;**78**:663.  
doi: 10.1136/jnnp.2006.109447

Correspondence to: Dr Helen S Cohen, Department of Otolaryngology, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030, USA; hcohen@bcm.tmc.edu

Supported by NIH grant DC003602.

Competing interests: None.

### REFERENCES

- 1 von Brevern M, Radtke A, Lezius F, *et al*. Epidemiology of benign paroxysmal positional vertigo: a population based study. *J Neurol Neurosurg Psychiatry* 2007;**78**:710-15.
- 2 Brandt T, Steddin S, Daroff RB. Therapy for benign paroxysmal positioning vertigo, revisited. *Neurology* 1994;**44**:796-800.
- 3 Cohen HS, Kimball KT. Effectiveness of treatments for benign paroxysmal positional vertigo of the posterior canal. *Otol Neurotol* 2005;**26**:1034-40.
- 4 Baloh RW, Honrubia V, Jacobson K. Benign positional vertigo: clinical and oculographic features in 240 cases. *Neurology* 1987;**37**:371-8.
- 5 Gacek RR. Pathology of benign paroxysmal positional vertigo revisited. *Ann Otol Rhinol Laryngol* 2003;**112**:574-82.
- 6 Jang YS, Hwang CH, Shin JY, *et al*. Age-related changes on the morphology of the otoconia. *Laryngoscope* 2006;**116**:996-1001.