



Ocular lateropulsion in acute vestibular neuritis

Received: 12 Mar. 2024
Accepted: 01 May 2024

Lisle Blackburn, Maher Salem, Deepak Nair

Department of Neurology, College of Medicine, University of Illinois, Peoria, USA

Keywords

Stroke; Head Impulse Test; Saccades; Smooth Pursuit; Eye Movements; Nystagmus; Vestibular Neuritis

Patient was a 41-year-old man who presented with sudden-onset nausea, vertigo, and gait imbalance with a blood pressure on arrival of 230/132. On physical examination, the patient had left rotational nystagmus in upright position, ocular lateropulsion, and a positive horizontal head impulse test.

The ocular lateropulsion can be seen in video 1. Brain computed tomography (CT), head and neck CT angiography (CTA), and brain magnetic resonance imaging (MRI) all showed no acute abnormalities. Ocular lateropulsion can be seen in both strokes such as Wallenberg syndrome and in benign pathology such as acute vestibular neuritis.¹

References

1. Kattah JC, Badihian S, Pula JH, Tarnutzer AA, Newman-Toker DE, Zee DS. Ocular lateral deviation with brief removal of visual fixation differentiates central from peripheral vestibular syndrome. *J Neurol* 2020; 267(12): 3763-72.
2. Newman-Toker DE, Kattah JC, Alvernia JE, Wang DZ. Normal head impulse test differentiates acute cerebellar strokes from vestibular neuritis. *Neurology* 2008; 70(24 Pt 2): 2378-85.

The ocular lateropulsion usually also exhibits saccades in stroke versus a smooth pursuit in acute vestibular neuritis. A positive horizontal head impulse test usually points to a peripheral cause; however, it should be noted that patients with lateral pontine and cerebellar strokes can still have a positive horizontal head impulse test.² A negative head impulse test points to a central pathology.

How to cite this article: Blackburn L, Salem M, Nair D. Ocular lateropulsion in acute vestibular neuritis. *Curr J Neurol* 2024; 23(3): ?-?.

Conflict of Interests

The authors declare no conflict of interest in this study.

Acknowledgments

None.