

# Teaching Video NeuroImages: Bilateral complete horizontal gaze palsy with preserved convergence

## The 1 + 1 syndrome



Damien Biotti, MD  
Caroline Tilikete, PhD

Correspondence to  
Dr. Biotti:  
biotti.d@chu-toulouse.fr

Bilateral complete horizontal gaze palsy, the 1 + 1 syndrome, is extremely rare. An otherwise healthy 25-year-old woman shows a recently acquired complete horizontal saccadic palsy. Its association with the absence of improvement with oculoccephalic maneuvers and the preservation of convergence clinically suggests a bilateral cranial nerve VI nucleus dysfunction<sup>1,2</sup> (video at Neurology.org; figures 1 and 2). Main causes include CNS inflammation, metabolic/toxic disorders, and regional expansive lesions. Mimickers such as myasthenia gravis or Fisher syndrome and anti-GQ1b-mediated disorders have to be meticulously excluded.

Despite exhaustive investigations, including repeated MRI, the cause remains unknown in this patient and no changes were observed over years.

### AUTHOR CONTRIBUTIONS

D. Biotti: first author, corresponding author, principal investigator, neuro-ophthalmologic management. C. Tilikete: data collection, neuro-ophthalmologic management.

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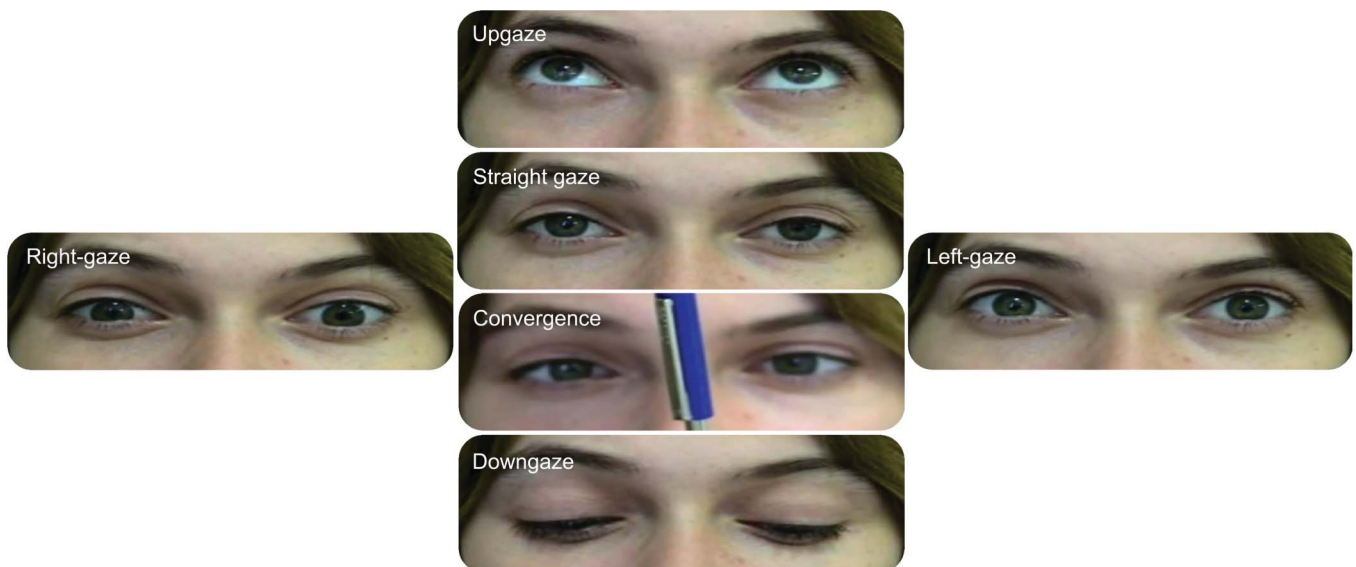
### DISCLOSURE

The authors report no disclosures relevant to the manuscript. Go to Neurology.org for full disclosures.

### REFERENCES

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2. Leigh R, Zee D. Disorders of ocular motility due to disease of the brainstem, cerebellum, and diencephalon. In: *The Neurology of Eye Movements*, 5th ed. Oxford: Oxford University Press; 2015.

**Figure 1** Ocular motor examination

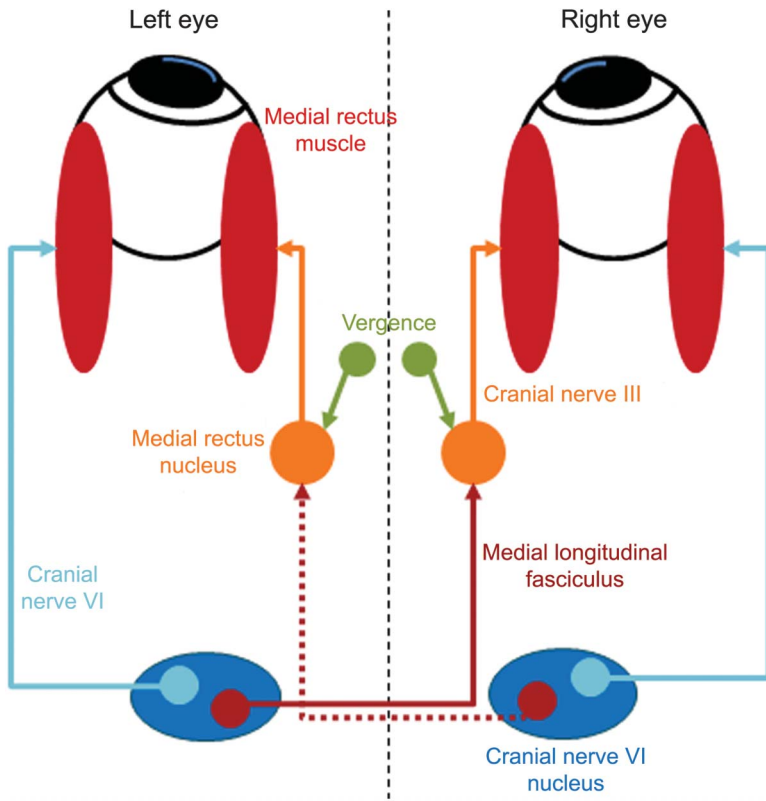


Supplemental data  
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From Pole des Neurosciences (D.B.), B4 Neurology Unit, Hôpital Pierre-Paul-Riquet, CHU Purpan, Toulouse; and Neuro-ophthalmology Unit (C.T.), Hôpital Neurologique, Hospices Civils de Lyon, Bron, France.

**Figure 2** Anatomical scheme of nuclear and infranuclear horizontal gaze pathways



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