

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^{1,2} (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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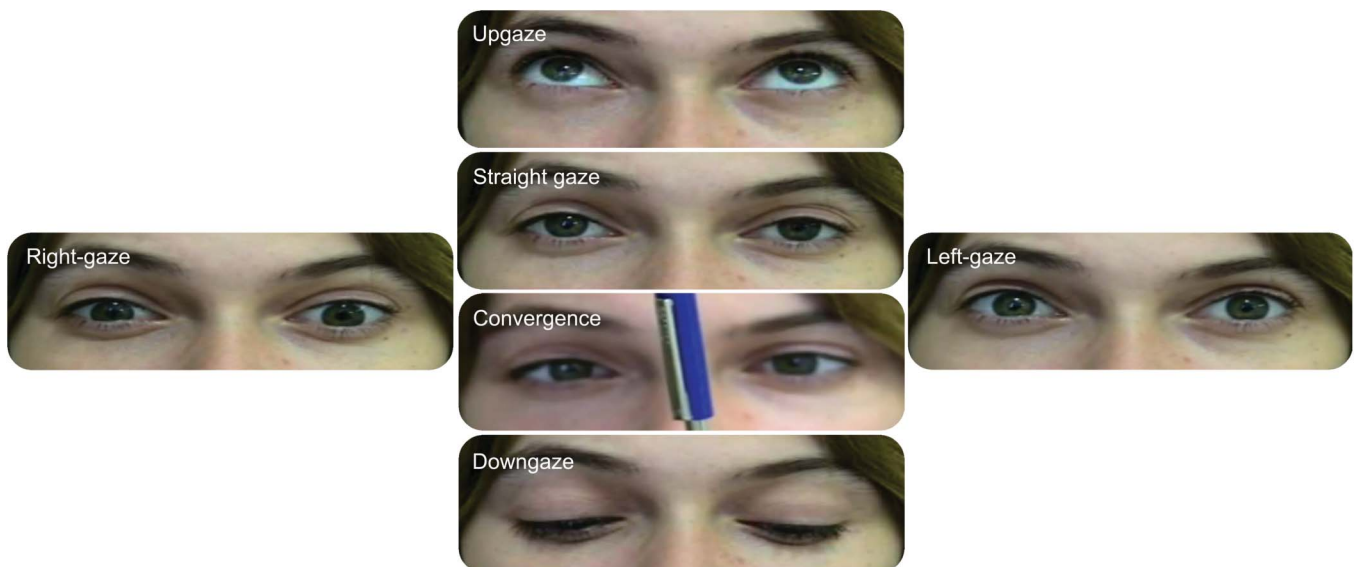
DISCLOSURE

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

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Figure 1 Ocular motor examination

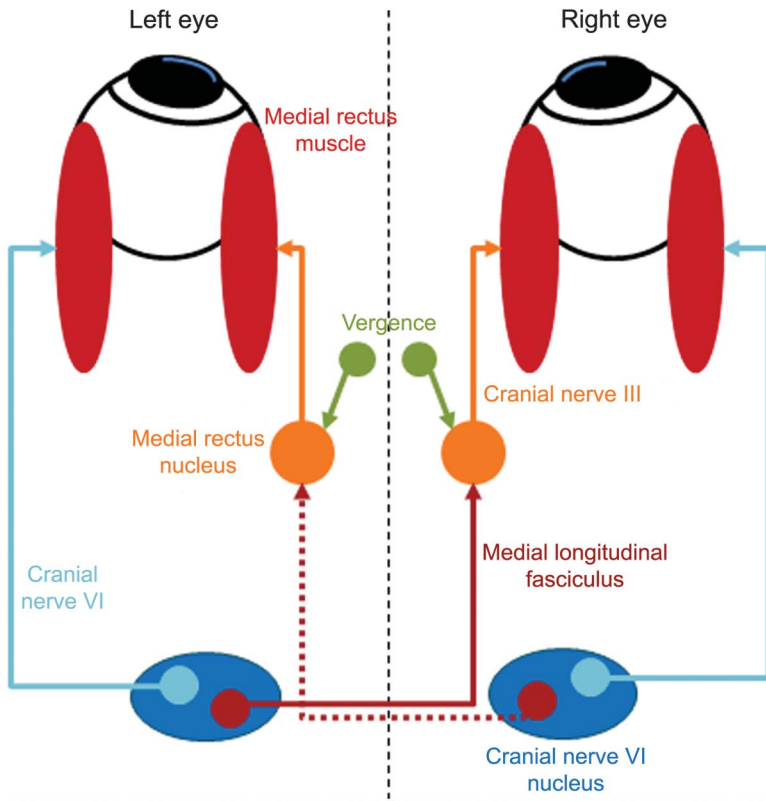


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From Pole des Neurosciences (D.B.), B4 Neurology Unit, Hôpital Pierre-Paul-Riquet, CHU Purpan, Toulouse; and Neuro-ophthalmology Unit (C.T.), Hôpital Neurologique, Hospices Civils de Lyon, Bron, France.

Figure 2 Anatomical scheme of nuclear and infranuclear horizontal gaze pathways



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