

Bedside Head Impulse Test: A Useful Tool for Patients With Sensory Ataxia

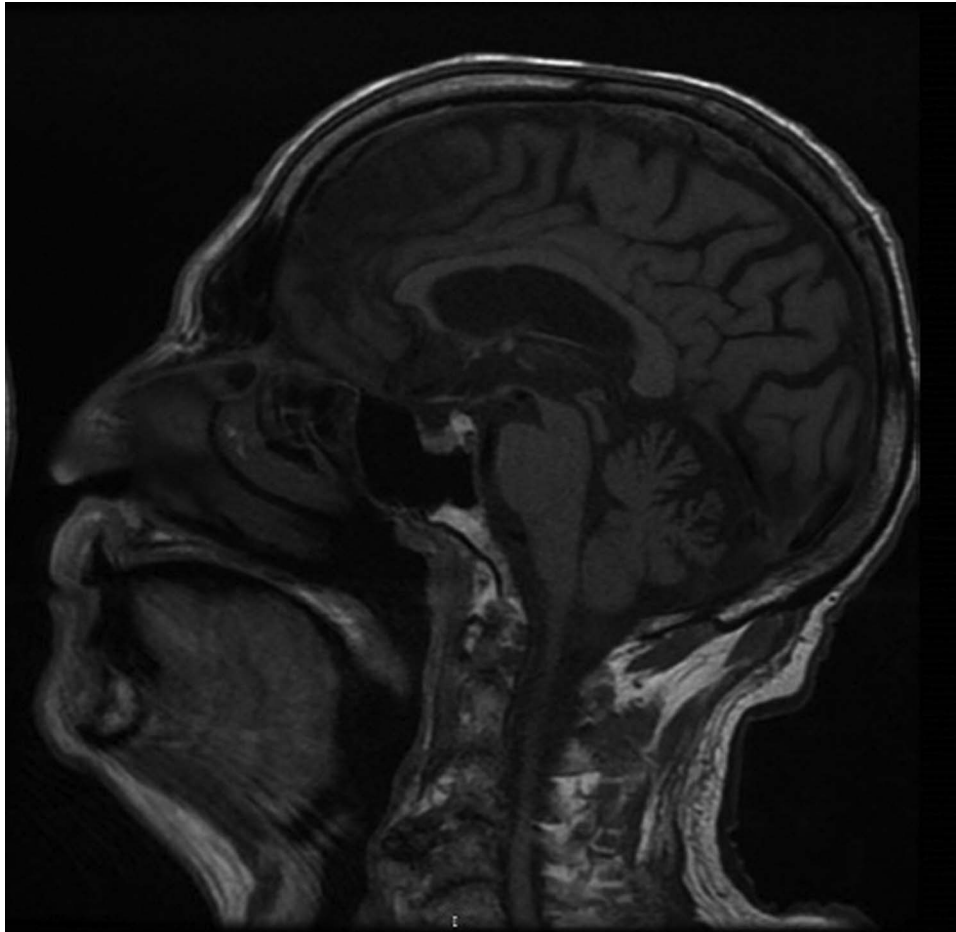
Stefano Tozza, MD, Andrea Cortese, MD, PhD, Aniello Iovino, MD, Marcello Esposito, MD, PhD, Natalia Dominik, MSc, Rosa Iodice, MD, and Fiore Manganelli, MD

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Correspondence

Dr. Tozza
ste.tozza@gmail.com

Figure Brain MRI of CANVAS Patient



Brain MR T1-weighted, midsagittal image shows cerebellar vermal atrophy. CANVAS = cerebellar ataxia, neuropathy and vestibular areflexia syndrome.

Case Summary

An 85-year-old man suffered from a 20-year history of idiopathic sensory neuronopathy (figure). Neurologic examination was characterized by severe sensory ataxia needing bilateral support

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▶ Video

From the Department of Neuroscience, Reproductive and Odontostomatology Science (S.T., A.I., M.E., R.I., and F.M.), University of Naples Federico II, Italy; MRC Centre for Neuromuscular Diseases (A.C. and N.D.), Department of Neuromuscular Diseases, National Hospital for Neurology and Neurosurgery, UCL Queen Square Institute of Neurology, United Kingdom; and Department of Brain and Behavioral Sciences, University of Pavia, Italy.

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during walking, subtle dysarthria, and reduced sensation for all modalities. Bedside head impulse test (HIT) revealed vestibular areflexia (video 1), arising suspicion of cerebellar ataxia, neuropathy, and vestibular areflexia syndrome (CANVAS), then confirmed by the presence of biallelic expansion in *RFC1* gene.¹ Clinical sensory involvement can be the only manifestation in some CANVAS patients,² and HIT, although overlooked in neurologic examination, should be performed in all patients with sensory ataxia to raise suspicion of CANVAS.

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Disclosure

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Appendix Authors

Name	Location	Contribution
Stefano Tozza, MD	Department of Neuroscience, Reproductive and Odontostomatology Science, University of Naples Federico II, Italy	Design and conceptualized study, acquisition and analyzed the data, and drafted the manuscript for intellectual content
Andrea Cortese, MD	MRC Center for Neuromuscular Diseases, Department of Neuromuscular Diseases, National Hospital for Neurology and Neurosurgery, UCL Queen Square Institute of Neurology, United Kingdom; Department of Brain and Behavioral Sciences, University of Pavia, Italy	Analyzed the data and revised the manuscript for intellectual content

Appendix (continued)

Name	Location	Contribution
Aniello Iovino, MD	Department of Neuroscience, Reproductive and Odontostomatology Science, University of Naples Federico II, Italy	Revised the manuscript for intellectual content
Marcello Esposito, MD, PhD	Department of Neuroscience, Reproductive and Odontostomatology Science, University of Naples Federico II, Italy	Revised the manuscript for intellectual content
Natalia Dominik	MRC Center for Neuromuscular Diseases, Department of Neuromuscular Diseases, National Hospital for Neurology and Neurosurgery, UCL Queen Square Institute of Neurology, United Kingdom	Analyzed the data and revised the manuscript for intellectual content
Rosa Iodice, MD	Department of Neuroscience, Reproductive and Odontostomatology Science, University of Naples Federico II, Italy	Revised the manuscript for intellectual content
Fiore Manganelli, MD	Department of Neuroscience, Reproductive and Odontostomatology Science, University of Naples Federico II, Italy	Design and conceptualized study and revised the manuscript for intellectual content

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