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

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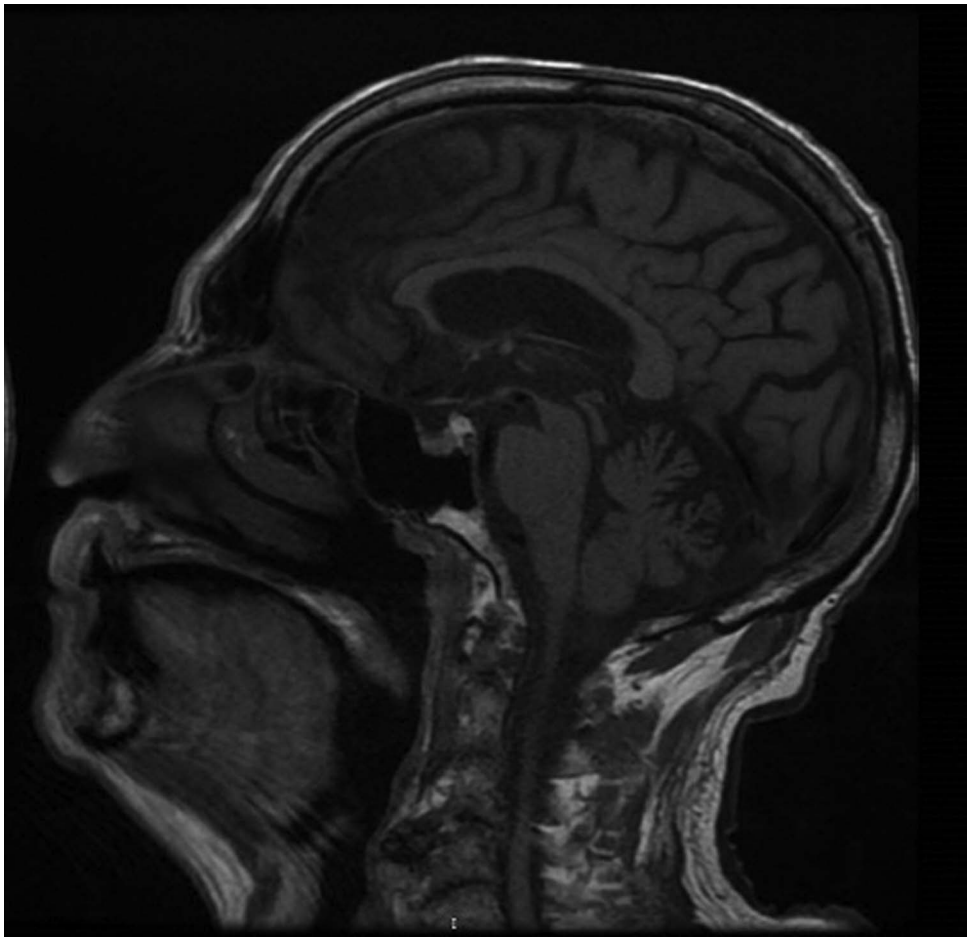
**Figure** Brain MRI of CANVAS Patient



Brain MR T1-weighted, midsagittal image shows cerebellar vermian 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

The authors declare no financial or other conflicts of interest. Go to Neurology.org/NG for full disclosures.


## Publication History

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| **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 |
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| **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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