Multiple Sclerosis Relapse Presenting as Sensorineural Hearing Loss

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Figure Multiple Images of MRI Brain Soon After Relapse Onset

Axial T2 (A) and T1 postcontrast (B) images show the plaque in the left paramedian pons (arrow) with extension to root of the VIIIth cranial nerve (arrowhead); (C) T2 and (D) T1 postcontrast coronal images of the same lesion; and axial T2 fluid-attenuated inversion recovery (E) and T1 postcontrast (F) images at a supraventricular level.

A 23-year-old patient with multiple sclerosis on dimethyl fumarate presented with new-onset left-sided hearing loss, vertigo, and tinnitus.¹ Prior to presentation, serial imaging showed no new or active lesions.

Rinne test was positive bilaterally and Weber test was lateralized to the right side. The remainder of the neurologic examination was normal. ENT workup excluded other causes of deafness. Contrast MRI brain revealed an active demyelinating plaque in the left paramedian pons extending to the root entry zone of the left vestibulocochlear nerve (figure). This differs from previously reported cases because there is evidence of involvement of the VIIIth nerve fascicle rather than the nerve.²

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Disclosure

The authors report no disclosures relevant to the manuscript. Go to [Neurology.org/N](https://www.neurology.org/N) for full disclosures.

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Name	Location	Contribution
Parth Bansal, MD	Dayanand Medical College and Hospital, Ludhiana, India	Designed and conceptualized study, analyzed the data, drafted the manuscript for intellectual content
Birinder S. Paul, DM	Dayanand Medical College and Hospital, Ludhiana, India	Supervised workup

Appendix (continued)

Name	Location	Contribution
Gagandeep Singh, DM, FAMS, FRCP	Dayanand Medical College and Hospital, Ludhiana, India	Designed and conceptualized study, revised the manuscript for intellectual content

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