

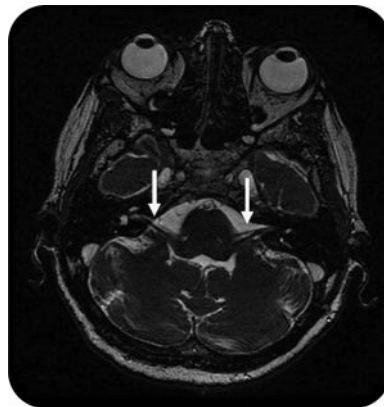
# Teaching NeuroImages:

## A case of hearing loss in a paraneoplastic syndrome associated with anti-Hu antibody

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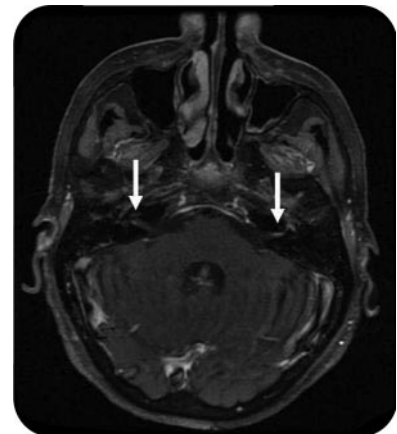
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**Figure 1** Brain MRI



Axial fast imaging employing steady state acquisition image shows hyperintensity of acoustic nerves (arrows) in the inner acoustic channels.

**Figure 2** Brain MRI



Axial enhanced fat-suppressed T1-weighted image shows contrast enhancement of acoustic nerves (arrows).

A 67-year-old woman was evaluated for subacute 4-limb paresthesias, deteriorating balance, and bilateral sensorineural hearing loss (SNHL). She was diagnosed with multiple lymph node metastasis from an occult small cell lung carcinoma. Neurophysiologic testing revealed sensory neuronopathy.

CSF analysis found mild proteinorrachia, no cells, and positivity for anti-Hu antibodies. Brain MRI showed contrast enhancement of acoustic nerves in the inner acoustic channels (figures 1 and 2). Subacute SNHL is the most common cranial neuropathy in anti-Hu-related paraneoplastic neurologic syndromes (PNS).<sup>1</sup> This case underlines the importance of MRI in PNS diagnosis,<sup>2</sup> extending MRI spectrum of radiologic findings in PNS.

### AUTHOR CONTRIBUTIONS

Dr. Renna: drafting/revising the manuscript, study concept or design, analysis, or interpretation of data, acquisition of data, study supervision. Dr. Plantone: drafting/revising the manuscript, study concept or design, analysis, or interpretation of data. Dr. Batocchi: drafting/revising the manuscript, analysis or interpretation of data.

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