

Teaching NeuroImage: Dura Mater Thickening and Enhancement in Anti-NMDAR Encephalitis

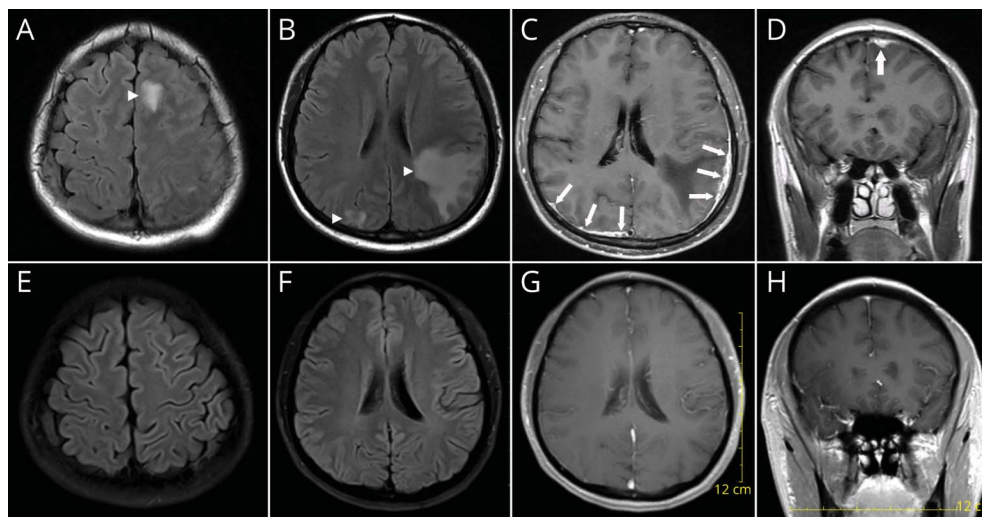
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Figure Neuroimaging (MRI) During the Course of the Disease



FLAIR images (A and B, arrowheads) showed multiple cortical and subcortical hyperintensities with adjacent dura mater thickening and enhancement (C and D, arrows). The FLAIR hyperintensities and dural enhancement improved after treatment (E-H). FLAIR = fluid-attenuated inversion recovery.

A 33-year-old man presented with baryglossia, memory disturbance, and seizures for a month. The workup for infectious and rheumatic disease was negative. Serum and CSF anti-NMDAR antibody were positive. MRI showed cortical and subcortical hyperintensities with adjacent pachymeningeal thickening and enhancement (Figure, A–D). Treatment with immunoglobulin and high-dose methylprednisolone produced significant improvement in the symptoms and resolution of changes on the posttreatment MRI (Figure, E–H).

The frequently reported abnormalities on MRI in anti-NMDAR encephalitis are leptomeningeal enhancement and T2/FLAIR cortical and subcortical hyperintensities in the temporal lobe, followed by the frontal lobe, periventricular region, and cerebellum, rarely involving the dura mater.^{1,2}

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Disclosure

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

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Appendix Authors

Name	Location	Contribution
Cheng Xia, MD	Department of Neurology, General Hospital of Northern Theater Command, Shenyang, China	Drafting/revision of the manuscript for content, including medical writing for content; major role in the acquisition of data

Appendix (continued)

Name	Location	Contribution
Hui-Sheng Chen, MD	Department of Neurology, General Hospital of Northern Theater Command, Shenyang, China	Study concept or design; analysis or interpretation of data

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