Teaching *NeuroImages*: Bilateral anterior thalami and fornix macrohemorrhage in Wernicke-Korsakoff syndrome

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Figure MRI

Sagittal T1-weighted MRI (A) shows hemorrhage involving the anterior thalamus just beneath the fornix. Axial T2*-weighted MRI (B) shows bilateral fornix hemorrhage with asymmetrical bithalamic involvement.

A 55-year-old man with alcoholism required sigmoid resection for complicated diverticulitis. A few weeks after starting parenteral nutrition, he developed multidirectional gaze nystagmus, gait ataxia, and confusion, leading to the diagnosis of Wernicke encephalopathy. Thiamine treatment was started and his symptoms improved, helping to confirm the diagnosis. However, the patient developed memory loss consistent with Korsakoff syndrome due to hemorrhage involving the fornix and the bilateral anterior thalami (figure). More typical fluid-attenuated inversion recovery lesions (mamillary bodies, tectal plate, and periaqueductal area), which may be reversible,¹ were not seen. Macroscopic hemorrhage is rarely observed in Wernicke-Korsakoff syndrome^{2,3} and is associated with poor prognosis.³

AUTHOR CONTRIBUTIONS

Dr. Nazarov: drafting/revising the manuscript, analysis or interpretation of data, contribution of vital reagents/tools/patients, acquisition of data, study supervision. Dr. Jeannin: drafting/revising the manuscript, study concept or design, contribution of vital reagents/tools/patients, acquisition of data, study supervision. Dr. Mejdoubi: drafting/revising the manuscript, analysis or interpretation of data. Dr. Signate: drafting/revising the manuscript. Dr. Smadja: drafting/revising the manuscript, analysis or interpretation of data.

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