

Teaching NeuroImages: Transient mutism associated with splenium lesion in capecitabine-induced leukoencephalopathy

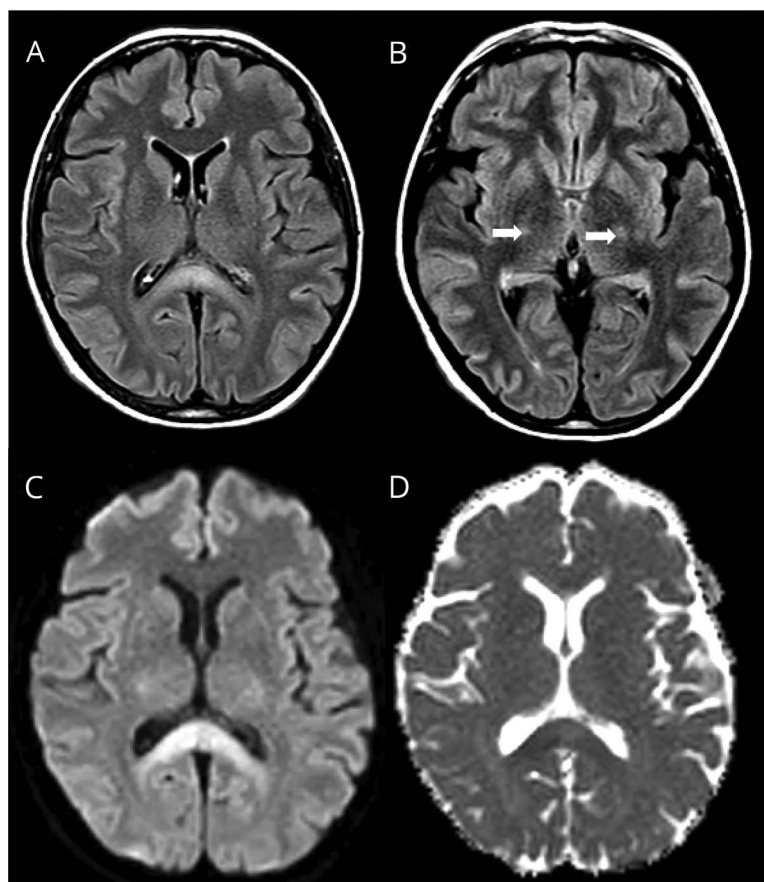
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Figure Brain MRI



Axial T2 fluid-attenuated inversion recovery images show symmetric bilateral hyperintensities of the splenium of the corpus callosum (A) and of the corticospinal tracts (arrows in B). Diffusion-weighted imaging (C) and apparent diffusion coefficient (D) sequences show restricted diffusion consistent with cytotoxic edema and suggestive of acute toxic leukoencephalopathy.

A 50-year-old woman presented with recurrent episodes of mutism on the 7th day of capecitabine therapy (1,250 mg/m² twice a day) for advanced gastric cancer. Interictal neurologic examination documented mild left hemiparesis and right Babinski sign. Brain CT, ictal EEG, electrolytes, ammoniemia, and vitamins B₁ and B₁₂ were all unremarkable. Brain MRI revealed symmetric bilateral hyperintensities of the splenium of the corpus callosum and of the corticospinal tracts on diffusion-weighted imaging and T2–fluid-attenuated inversion recovery sequences (figure). Symptoms subsided 2 days after chemotherapy withdrawal. Transient mutism has been reported following callosotomy for

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drug-resistant epilepsy¹ or in toxic leukoencephalopathies typically involving the callosal fibers.²

Author contributions

Dr. Nicoletti, Dr. Spagni, Dr. Luigetti, Dr. Iorio: drafting/ revising the manuscript for content, including medical writing for content. Dr. Nicoletti, Dr. Spagni, Dr. Iorio: study concept or design. Dr. Nicoletti, Dr. Spagni, Dr. Luigetti, Dr. Iorio: analysis or interpretation of data. Dr. Nicoletti, Dr. Spagni, Dr. Luigetti, Dr. Iorio: acquisition of data. Dr. Nicoletti, Dr. Spagni, Dr. Luigetti, Dr. Iorio: study supervision or coordination.

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Disclosure

The authors report no disclosures relevant to the manuscript. Go to Neurology.org/N for full disclosures.

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