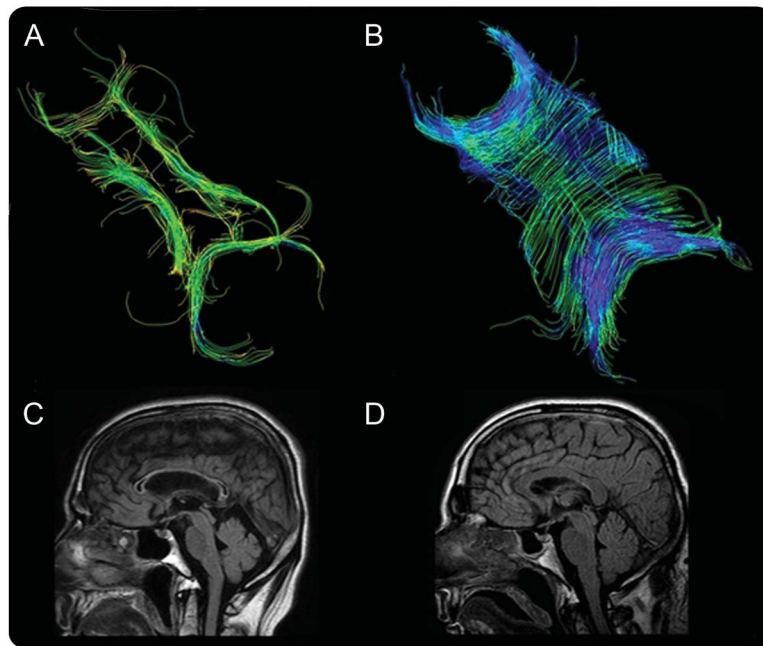


Marchiafava-Bignami disease

An acquired callosotomy

Figure Corpus callosum tractography and MRI findings in Marchiafava-Bignami disease compared to age- and sex-matched control subject



(A) Corpus callosum (CC) tractography in Marchiafava-Bignami disease shows lack of midline transverse fibers. (B) CC tractography of control subject. (C) Sagittal fluid-attenuated inversion recovery (FLAIR) image depicts central CC atrophy (low signal intensity) with sparing of the peripheral layers (hyperintense signal). (D) Sagittal FLAIR image of control subject.

A 57-year-old man with a history of chronic alcoholism was evaluated for seizures. MRI showed severe diffuse atrophy of the corpus callosum (CC). Clinical examination revealed bimanual coordination difficulties, left ideomotor apraxia, and tactile anomia. The genu and the splenium had central cystic degeneration, with sparing of the peripheral layers. Tractography showed the lack of central white matter tracts, an “acquired callosotomy” (figure). The imaging findings were compatible with the chronic phase of Marchiafava-Bignami disease, a rare demyelinating disorder, primarily affecting the central CC layers, thought to be due to chronic alcohol consumption.^{1,2}

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