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Intravascular lymphoma of the central nervous system: a rare subtype of a common disease

Linfoma intravascular do sistema nervoso central: um subtipo raro de uma condição comum

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A 67-year-old man had a sudden onset of headache and aphasia, evolving to spontaneous improvement. A few months later, he developed dysarthria and left hemiparesis. Brain MRI showed several punctate lesions with perilesional edema, perivascular enhancement and restricted diffusion on DWI (Figure 1). PET-CT demonstrated mild uptake (Figure 1). Anatomopathological and immunohistochemical analysis were compatible with intravascular large B-cell lymphoma (IVL) (Figure 2). Treatment with R-CHOP and intrathecal methotrexate was established, with favorable response due to high tumor sensitivity[1]. Approximately half of IVL cases are diagnosed only after autopsy[2]. The main differential diagnoses are vasculitis, neurosarcoidosis, and ischemic stroke[3,4].

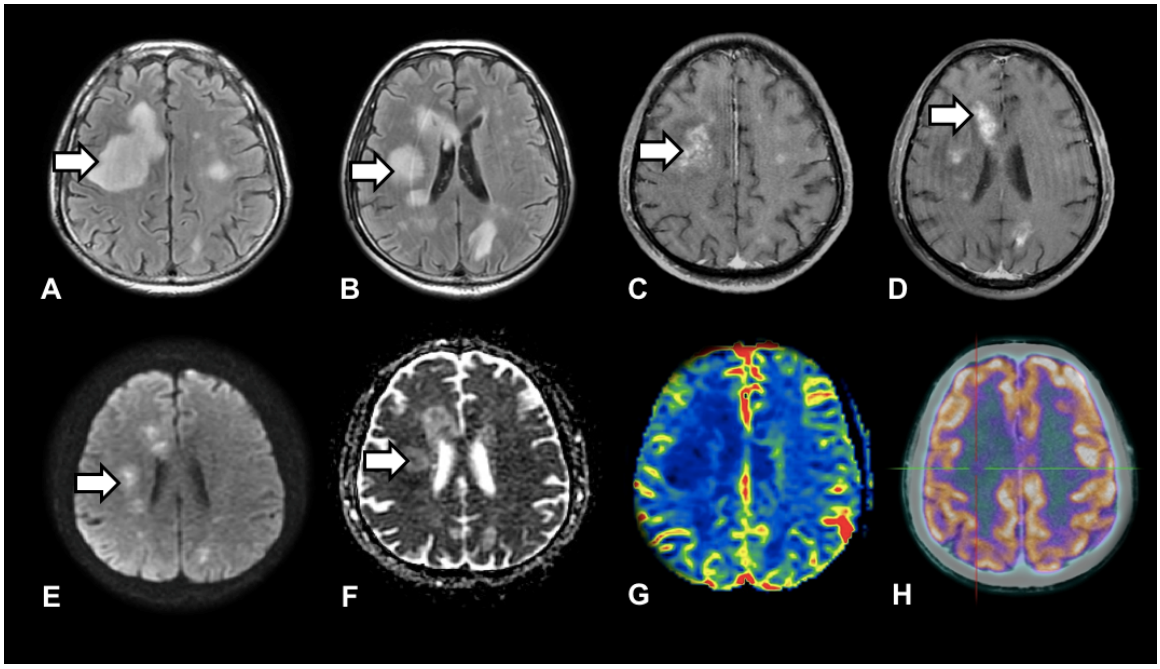

Figure 1. Magnetic resonance imaging findings of intravascular lymphoma. (A and B) Fluid-attenuated inversion recovery axial images showed diffuse multiple hyperintensities of the cerebral white matter. (C and D) The perivascular curvilinear enhancement on T1-weighted imaging with gadolinium expanded markedly. (E and F) Diffusion-weighted imaging and apparent diffusion coefficient map showed restricted diffusion. (G and H) Perfusion magnetic resonance imaging (relative cerebral blood volume) and positron emission tomography – computed tomography were practically unremarkable.

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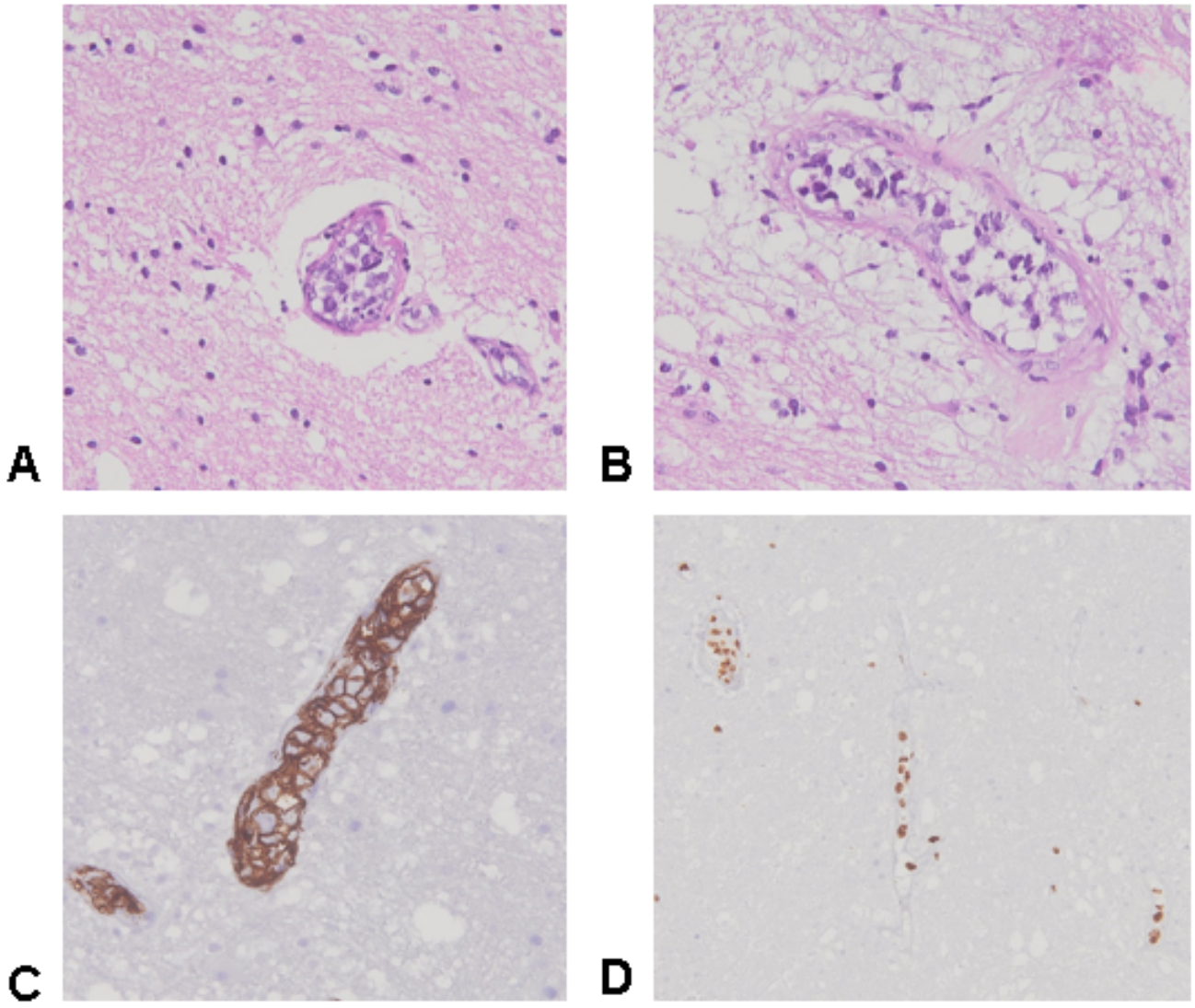

Figure 2. Brain pathology showing small blood vessels filled with lymphoma cells and perivascular reactive lymphocytes (A and B). Immuno his to chemical staining showing CD20+ (C and D).

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