

PATHOLOGICALLY CONFIRMED TUMEFACTIVE AND RECURRENT DEMYELINATING LESIONS IN THE BRAIN

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Background: Atypical imaging features of multiple sclerosis have been described, which may confound the diagnostic process. These atypical clinical and imaging presentations may mimic brain tumour, cerebral abscess or other inflammatory disorders, and may necessitate a brain biopsy for diagnosis.

Case: A 65-year-old woman presented to our hospital with 10-day history of aphasia. He could not understand complex sentences. Magnetic resonance imaging demonstrated 2x3x2cm solitary large lesion associated mass effect and perilesional edema in left frontal lobe. This lobular shaped lesion was homogeneously enhanced by gadolinium on T1-weighted images. The patient underwent surgery for resection of the lesion. Postoperative pathology indicated chronic inflammation with reactive gliosis. 10 months later, she admitted to the hospital with right side weakness and progression of aphasia. Follow up magnetic resonance imaging demonstrated newly developed enhancing mass lesion in left deep gray matter. An open biopsy under navigation system was performed. Histological investigation was same as the previous result, chronic inflammation with reactive gliosis. The patient was treated with high-dose corticosteroid. The follow-up magnetic resonance imaging was improved dramatically after administration of steroid. No abnormal enhancing lesion is noted in the brain.

Conclusion: Distinguishing the tumefactive demyelinating lesions from neoplasm is important, since a misdiagnosis can lead to inadvertent brain irradiation or surgery. This case highlights the importance of considering tumefactive demyelinating lesions in the differential diagnosis of intracranial mass lesions. Timely diagnosis can save patient from potentially harmful aggressive treatment.