

## **RECURRENCE OF TUMEFACTIVE DEMYELINATING LESIONS: CASE REPORT**

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**Introduction:** Typical MRI appearance of multiple sclerosis (MS) lesions is multifocal and asymmetrical, usually located in the subcortical and periventricular white matter. Tumefactive demyelinating lesions are over 20mm in size that can be misdiagnosed as tumor. Edema without relative mass effect, incomplete ring of gadolinium enhancement and high percentage (85%) of additional white matter lesions are important features.

**Case:** Forty-seven year-old female was presented in December 2011 with subacutely developed left-sided weakness. Cranial MRI revealed a large mass-like, contrast-enhanced lesion in right frontoparietal lobe, initially diagnosed as tumor, but histiocyte-rich tissue was detected in biopsy, which supported demyelination. Postoperatively she was admitted with left residual hemiplegia, complaining of left-sided contractions, probable lesion-related secondary-generalized seizures. After high-dose corticosteroid, left-sided weakness was gradually decreased, cranial MRI showed regression. In November 2012, she was hospitalized with subacute development of speaking difficulty, confusion, right-sided weakness. Cranial MRI revealed a mass-like, open-ring contrast-enhanced, left temporal lobe-located lesion. She responded to high-dose corticosteroid with clinical improvement and lesion regression. The oligoclonal band was negative and there were no tumor cells in cerebrospinal fluid.

**Conclusion:** Tumefactive MS can mimic clinical and radiological spectrum of neoplasms. Neuroimaging techniques can be used to differentiate tumor from tumefactive MS, but since there are no specific radiological findings, biopsy is necessary for a definite answer. Our patient with two single tumor-like lesions at different sites of brain over a year and without any additional white matter lesions sets a unique example of recurrent tumefactive demyelination, which is a very rare condition.