ABSTRACT

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Glioblastoma in Patients With Multiple Sclerosis.

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BACKGROUND: Although rare, the co-occurrence of multiple sclerosis (MS) and glioma poses unique challenges in terms of diagnosis and management for both neurologists and neuro-oncologists.

METHODS: Here we report on a single-center cohort of four patients with a diagnosis of multiple sclerosis who developed gliomas.

RESULTS: Our cohort reflects the epidemiology of glioma in terms of the relative frequency of IDH-wildtype and IDH-mutant cases. The patients in 3 out of the 4 cases presented did not develop their tumors in areas of pre-existing demyelinating lesions.

CONCLUSIONS: We did not find evidence to support the hypothesis that chronic gliosis from demyelinating plaques may serve as a substrate for secondary induction of a glial neoplasm. In our Discussion, we provide recommendations for distinguishing neoplastic from demyelinating lesions, review the evidence for demyelination as a risk factor for gliomagenesis, and highlight important considerations for the concurrent management of glioma and MS.

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