

## **Glioblastoma following treatment with interferon beta-1a for relapsing-remitting multiple sclerosis**

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Introduction: Glioblastoma is an uncommon and aggressive primary brain tumor with an incidence of 3 per 100,000 annually. Several types of brain tumors have been described in association with multiple sclerosis (MS) such as astrocytoma, oligodendroglioma and glioblastoma. Possible predisposing factors to this co-existence include a subclinical immunosuppressive state and the activation of autoimmune mechanisms in effort to induce remyelination. We report a 45 year-old woman diagnosed with glioblastoma within 10 years of induction of interferon beta-1a therapy for relapsing- remitting MS. To our knowledge this is the first report of a potential association between interferon and glioblastoma development.

Conclusion: MS patients have an increased risk for brain and genitourinary tumors. Diagnostic procedures relating to the differentiation between pseudotumoral MS lesions and gliomas are imperative. The role of immunosuppressive treatment of MS in carcinogenesis remains a matter of debate.