

Disappearance of gadolinium enhancement in a chemoresistant astrocytoma of the tectum after high-dose interferon beta

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ABSTRACT

Interferon beta 6 million units per week was administered to a patient with an aggressive astrocytoma in the tectum that was resistant to cisplatin, etoposide, vinblastine, and the oral alkylating agent temozolomide. The tumor was immunopositive for O⁶-methylguanine-DNA methyltransferase (MGMT). Interferon beta caused the disappearance of the gadolinium-enhanced lesion in the tectum. Interferons have apoptotic and antiangiogenic effects on tumor cells, and the lesion's disappearance may have been induced by complexes of these effects. Administration of interferon beta might have a favorable effect on tectal gliomas that are immunopositive for MGMT and resistant to chemoradiotherapy including temozolomide.

Key words: tectal glioma, interferon beta, chemoradiotherapy, temozolomide.

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