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1: [Surg Neurol](#). 2009 Aug 6. [Epub ahead of print]



**Rapid malignant transformation of low-grade astrocytomas: report of 2 cases and review of the literature.**

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**BACKGROUND:** Low-grade gliomas have been documented to undergo transformation into high-grade astrocytomas, and the time interval of this transformation has been reported to generally occur within 5 years in about 50% of patients harboring these low-grade lesions. Several studies have investigated the evolution of low-grade gliomas into malignant gliomas by CT and MRI characteristics, but many have not documented the timing of these transformation processes. **CASE DESCRIPTION:** The authors discuss the cases of 2 patients with histopathologically confirmed grade II astrocytomas after craniotomies that underwent rapid evolution into malignant gliomas within 13 weeks. Interestingly, both low-grade astrocytomas were positive with immunostaining for the epidermal growth factor receptor, in which its amplification has been implicated as a molecular marker of malignant gliomas. In addition, the grade II astrocytomas were negative for p53 in both patients but were found to be positive upon transformation into malignant gliomas. **CONCLUSIONS:** To our knowledge, this is the first report of rapid malignant transformation of low-grade gliomas, which were proven by histology, within 13 weeks. There may be patients with a subtype of low-grade astrocytomas that may warrant molecular characterization to determine if aggressive adjuvant therapy would be of benefit.

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