Format: Abstract

Pediatr Blood Cancer. 2017 Jul 11. doi: 10.1002/pbc.26708. [Epub ahead of print]

Complete durable response of a pediatric anaplastic oligodendroglioma to temozolomide alone: Case report and review of literature.

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Abstract

Anaplastic oligodendroglioma (AO) is rare in children. Treatment typically consists of varying combinations of surgery, chemotherapy, and radiotherapy. We present a pediatric case of frontal lobe AO with periventricular subcallosal extension and local leptomeningeal involvement. The isocitrate dehydrogenase (IDH) wild-type tumor was MGMT methylated and contained an ATRX mutation, BRAF alteration, and 1p/19q co-deletion; a combination of alterations mostly encountered in pediatric oligodendrogliomas. The patient underwent a near total resection and had a complete, durable response to temozolomide alone, suggesting that conservative management without radiation may be appropriate in some cases. We review the literature of this uncommon subtype of glioma in children.

KEYWORDS: 1p19q; children; codeletion; oligodendroglioma; pediatric; temozolomide

PMID: 28696020 DOI: 10.1002/pbc.26708