

ABSTRACT

Neurosurgery. 1993 Dec;33(6):964-71. doi: 10.1227/00006123-199312000-00002.

Management and outcome of low-grade astrocytomas of the midline in children: a retrospective review.

Hoffman HJ(1), Soloniuk DS, Humphreys RP, Drake JM, Becker LE, De Lima BO, Piatt JH Jr.

Author information:

(1)Division of Neurosurgery, Hospital for Sick Children, Toronto, Ontario, Canada.

Comment in

Neurosurgery. 1994 Aug;35(2):342-3.

Low-grade astrocytomas of the midline of the brain can be difficult to manage because of their location. To evaluate treatment and outcome, we performed a retrospective study of children with midline low-grade astrocytomas admitted to The Hospital for Sick Children between 1976 and 1991. Eighty-eight children with

biopsy-proven low-grade astrocytomas were identified. Forty-three tumors occurred in the optic pathways or hypothalamus, 13 in the thalamus, 7 in the pineal region, 14 in the midbrain, and 11 in the medulla. Patient follow-up ranged from 6 months to 15 years, with a mean of 4 years, 9 months. Overall outcome was related to the extent of resection, histological type, and location.

Partial resections were often associated with involution of the tumor. Response to radiation was variable, and serious sequelae were observed. Thirty-three patients experienced recurrence, often with a good response to subsequent surgery; however, 12 of these patients died. The probability of survival was calculated to be 96% at 1 year, 91% at 5, and 80% at 10 years. Our study suggests that resection should be considered in all patients, both at presentation and recurrence.

DOI: 10.1227/00006123-199312000-00002

PMID: 8134009 [Indexed for MEDLINE]