Clinical attributes and surgical outcomes of angiocentric gliomas.

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Abstract

Angiocentric gliomas (AG) are exceedingly rare low-grade neoplasms which often present in the form of intractable epilepsy within younger patients. The current study extensively reviews all reported cases which were pathologically verified as AG in the literature to analyze clinical attributes and surgical outcomes of this neoplasm. There were 88 patients with AG reported in the literature consisting mostly of pediatric cases. The sex distribution consisted of 45 males and 36 females with the remaining seven cases not documenting sex. The average age of initial diagnosis was 16 years with almost half of all diagnosed patients being within the first decade of life. In cases where extent of resection was reported, gross total resection (GTR) was achieved in 54 patients, subtotal resection (STR) in 16, and biopsy only in three. Post-operative complications were transient and only occurred in three patients with no reports of death following surgery. Only five cases reported tumor recurrence on follow-up. Eight patients had seizure recurrence post-operatively and GTR offered improved rates of seizure control when compared to STR (p=0.0005). Nearly half of the cases of AG are diagnosed within the first decade of life and they usually manifest with intractable seizures. GTR appears to offer better seizure control in the post-operative period. Surgical resection is the mainstay therapy for AG as post-operative complications and tumor recurrence remain uncommon. Since the number of reported cases is limited, future studies with longer follow-up periods will help elaborate more long-term outcomes.

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KEYWORDS: Angiocentric; Epilepsy; Glioma; Low grade; Seizure

PMID: 26778052 DOI: 10.1016/j.jocn.2015.11.015

[PubMed - in process]