Pediatric Neurosurgery

Vol. 44, No. 1, 2008

Free Abstract Article (Fulltext) Article (PDF 189 KB)

Original Paper

Pediatric Intracranial Meningiomas - Do They Differ from Their Counterparts in Adults?

A. Arivazhagan, B. Indira Devi, Sastry V.R. Kolluri, R.G. Abraham, S. Sampath, B.A. Chandramouli

Department of Neurosurgery, National Institute of Mental Health and Neurosciences, Bangalore, India

Address of Corresponding Author

Pediatric Neurosurgery 2008;44:43-48 (DOI: 10.1159/000110661)

Key Words

- Pediatric meningiomas
- Intraventricular meningiomas
- Neurofibromatosis
- Pediatric intracranial neoplasms

Abstract

Aim: Meningiomas are very rare in children comprising only 0.44.1% of pediatric age tumors and only 1.5-1.8% of all intracranial neoplasms. We analyzed the clinical, pathological and management profile of these rare tumors and elucidated their differences from meningiomas in adults. *Methods:* From 1990 to 2005, 33 patients belonging to the pediatric age group with intracranial meningiomas were treated in NIMHANS. *Results:* There were 19 male and 14 female children. The duration of symptoms ranged from 1 to 60 months. The study had a mean follow-up of 23.4 months. The commonest presenting symptoms were headache (90.9%) and visual disturbances (51.5%). Three patients had associated neurofibromatosis. Calcification was noticed in 22% of the tumors. Intraventricular meningiomas were the commonest (24.2%). Gross total or near total resection was possible in 22 out of 33 patients. Nine patients had reversible postoperative motor deficits. Fibrous meningioma was the commonest histological subtype (24.2%). Five patients had atypical or anaplastic subtypes. Adjuvant radiotherapy was administered in 4 patients. Six patients had recurrences and underwent surgery. Ten patients required either staged procedures or multiple surgeries for the recurrence/residual tumors. *Conclusion:* Pediatric meningiomas are rare tumors and differ from those in adults by their male predominance, atypical locations, higher rates of malignant subtypes, recurrence and association with neurofibromatosis. Surgical management is challenging because of atypical location.

Author Contacts

Dr. B. Indira Devi
Department of Neurosurgery, National Institute of Mental Health and Neurosciences
Bangalore 560029 (India)
Tel. +91 80 2699 5409, Fax +91 80 6564 830/6562 121
E-Mail bindira@nimhans.kar.nic.in

Article Information

Received: January 22, 2007
Accepted after revision: June 25, 2007
Published online: December 14, 2007
Number of Print Pages : **6**
Number of Figures : **1**, Number of Tables : **4**, Number of References : **24**

Free Abstract Article (Fulltext) Article (PDF 189 KB)