Pediatric Meningiomas. A Retrospective Analysis of 37 Surgical Cases.

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Introduction:

Pediatric meningiomas are infrequently encountered in clinical practice. In comparison to adults, they have a distinct pathophysiology and clinical presentation. They are benign but locally aggressive tumors. Radical excision often culminates in good outcome.

Learning Objectives:

To study the demographic profile, clinicoradiological features, pathophysiology and surgical outcome of childhood meningiomas.

Methodology:

The case records of patients less than 18 yrs of age operated for meningiomas in our institute from 1985 to 2014 was retrieved. The demographic profile, clinical and radiological features, surgical approach, extension of resection and surgical outcome were recorded and subsequently analyzed.

Results:

Amongst 37 patients, 20 were males and 17 were females. The mean age was 13 years. 20% children had identifiable predisposing etiologies like Neurofibromatosis and radiation exposure. There were 31 intracranial and 6 spinal meningiomas. Headache associated with vomiting was the most presenting complaint. Majority were supratentorial tumors. A safe maximal excision was attempted in each case.Recurrence was noted in 5 patients. Average follow-up was about 24 months.2 patients succumbed to their illness and 30% patients had significant morbidity.

Conclusion:

Although rare, pediatric meningiomas are biologically different from their adult counterparts. They have a male predominance, common in intraventricularregion and cystic in nature. Radical excision is associated with good prognosis. Although benign, they are aggressive in nature and have a tendency to recur.The response to adjuvant therapy is modest. Further molecular research and genetic studies are necessary to understand the biology of pediatric meningiomas, which will help in indentification of targeted molecular therapy.

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Few of our cases: