

Case Reports

Chordoid Meningioma Associated with Chronic Subdural Hematoma

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Meningioma complicated with chronic subdural hematoma is rare. This complication has been described mainly in adults and is extremely rare in children. Recently, we came across a case of chordoid meningioma in association with chronic subdural hematoma which is being reported.

Case Report

A 5-year-old male child was admitted with complaints of headache and vomiting of 2Vi months duration.

On examination, higher functions were normal. There was bilateral papilldema and no motor or sensory deficit. Plantars were flexor. Hemogram, urinalysis and chest X-ray were normal. Computed tomography revealed evidence of bifrontal subdural hematoma and underlying isodense mass with evidence of edema at the periphery (*Fig. 1*). On contrast administration, the tumor showed enhancement. Bifrontal craniotomy revealed subdural hematoma with membrane formation. Underlying the hematoma membrane there was a 12.5 x 12.5 cm sized, lobulated, soft, suck able tumor, moderately vascular which was removed *in toto*. Histopathology revealed

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Received for publication: March 16, 1996;

Accepted: March 26, 1996



Fig. 1. Computed tomography scan showing bifrontal chronic subdural hematoma and isodense mass with perifocal oedema.

meningothelial cells separated by loose myxomatous tissue suggesting chordoid meningioma. Postoperative period was uneventful and follow up CT scan showed no evidence of tumor.

Six months later, he was readmitted in a state of altered sensorium. On examination, he had bilateral papilledema and he responded to painful stimuli. Computed tomography at this time revealed recurrence of tumor which again was removed by surgery. Histopathology revealed the same type of tumor as seen during first surgery and there were no signs of malignant transformation. Postoperatively he remained unconscious and died at home after ten days of discharge from the hospital.

Discussion

Meningiomas occur predominantly during the fifth decade of life and they are less common in the first decade(1-3). Ferrante *et al.*(A) in review of literature could find 178 cases of meningiomas in children upto age of 16 and added 19 of their own. Female preponderance is not seen in children because of lack of hormonal influence and duration of symptoms also seem to be shorter than adults(5). The lack of neural attachment is another characteristic finding in pediatric age group and, this was noted in our case as well. Two of 7 cases of chordoid meningioma reported earlier (6) occurred in children below 10 years of age and so did our case. In this, meningeal neoplasms are characterized by a chordoma like histologic appearance. Hemorrhage associated with meningiomas may be intratumoral, intraventricular, subarachnoid and/or subdural. Subarachnoid hemorrhage is the most common type and subdural hematoma the least common type(5). Popovic *et al.*(5) in a review of meningioma with subdural hematoma could find 41 such cases in the literature, out of which 15 had chronic subdural hematoma, all in adults. Meningothelial angioblastic and malignant meningiomas have more propensity to bleed(5). Computed tomography with contrast can easily pick up the hematoma as well as the tumor and both can be treated simultaneously. Rupture of bridging veins or intratumoral vessels might be responsible for the formation of subdural hematoma. Rapid recurrence, as seen in our patient, is an unusual feature in benign tumors.

Acknowledgement

We are grateful to Dr. S.K. Khanna, Director, G.B. Pant Hospital for allowing us to publish this article.

REFERENCES

1. Davidson GS, Hope JK. Meningeal tumors in childhood. *Cancer* 1989, 63: 1205-1210.
2. Herz DA, Shapiro K, Shulman K. Intracranial meningiomas in infancy, childhood and adolescence. Review of the literature and addition of 9 cases. *Childs Brain* 1980, 7: 43-56.
3. Germano IM, Edwards MSB, Davis RL, Schiffer D. Intracranial meningiomas of the first two decades of life. *J Neurosurg* 1994, 80: 447-553.
4. Ferrante L, Acqui M, Artico M, Mastronardi L, Rochni G, Fortuna A. Cerebral meningiomas in children. *Child's Nerv Syst* 1989, 5: 83-86.
5. Popovic EA, Lyons MK, Scheithauer BW, Marsh WR. Mast cell-rich convexity meningioma presenting as chronic subdural hematoma: Case report and review of literature. *Surg Neurol* 1994, 42: 8-13.
6. Kepes JJ, Chen WYK, Connors MH, Vogel FS. Chordoid meningeal tumors in young individuals with peritumoural lymphoplasmacellular infiltrates causing systemic manifestations of Castleman syndrome-A report of seven cases. *Cancer* 1988, 62: 391-406.

NOTES AND NEWS

VIII NATIONAL PEDIATRIC NEPHROLOGY UPDATE

This event is to held under the auspices of Nephrology Chapter, Bangalore Branch and Karnataka State Branch of Indian Academy of Pediatrics at Bangalore on 2nd and 3rd November, 1996. Highlights include sessions on nephrourology, nephroradiology, parental counselling on common renal diseases, peritoneal dialysis workshop, P.G. teaching programme, case discussion, and P.G. quiz in pediatric nephrology. The delegate fee is Rs. 300/- till September 30,1996, Rs. 400/- till October 31,1996 and Rs. 500/- later. Post-graduate students will be entitled to a discount of Rs. 100/-. For further details please contact the Organizing Secretaries Dr. Nisarga, R, 503, (Old No. 121), T. Mariyappa Road, Jayanagar I Block, Bangalore - 560 017 or Dr. Radhakrishna Hegde, No. 64, 1st Stage, II Cross, Indiranagar, Bangalore - 560 038.