Pediatric Surgery

Colloid Cyst of the Third Ventricle

B.R. Torcato S.M. Joshi V.P. Dandge P.M. Pal

Colloid cyst of the third ventricle constitute a rare variety of intracranial neoplasm. We herewith report two cases over a period of one and half years.

Case Reports

Case 1: A ten-year-old boy presented with headache, irritability and vomiting for 15 days. The child was irritable, had normal vital parameters, neck stiffness, Grade II papilledema with fundal hemorrhages on right side and no focal deficits on admission. X-ray skull showed raised intracranial tension and computerized tomography

From the Department of Pediatrics, B.Y.L. Nair Ch. Hospital, Dr. A.L. Nair Road, Bombay 400 008.

Reprint requests: Dr. S.M. Joshi, 2/43, Hanuman Ramand, Janabai Road, Vile-Parle, Bombay 400 057.

Received for publication: August 16, 1991; Accepted: September 23, 1993 showed an isodense, ring enchaining, well circumscribed lesion in the anterosuperior third ventricle compatible with the diagnosis of colloid cyst; along with moderate dilatation of lateral and third ventricles (Fig- I)-

The patient underwent transfrontal cyst removal following which he developed transient left hemiparesis. At this stage repeat computerized tomography was done to rule out subdural hematoma. Child's hemiparesis improved gradually and has almost recovered fully with no recurrence of colloid cyst documented on subsequent CT scan done 2 years later.

Case 2: A previously healthy 6-year-old girl was admitted with history of sudden onset of drowsiness and repeated convulsions for one day. The child was in Grade II coma with bilateral papilledema without neurological deficit. CT Scan showed an isodense 3rd ventricular cyst with moderate hydrocephalus (Fig. 2). The patient had rapid neurological deterioration and succumbed despite urgent ventriculoperitoneal shunt and transfrontal cyst removal.

Discussion

Third ventricular colloid cysts represent an uncommon (1.1%) variety of intracranial tumors(l) and constitute about 18% of third ventricular tumors(2).

Wallmann was the first to report a case in a 50-year-old man(3), the common presentation being between 20 and 50 years of age(4). The commonest site is the third ventricular roof posterior to the foramen of Monro and symptomatic cysts usually range from 1-3 cm in diameter. Episodes of paroxysms of headache, vomiting and am-

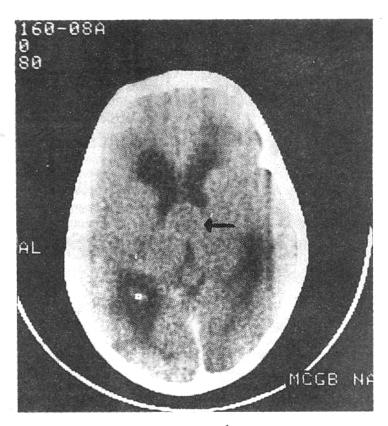


Fig. 1. Enhanced CT Scan showing minimal ring enhancement with an isodense cyst in Case 1.

plyopia (in some) followed by coma or profound mental changes are classical of colloid cyst and are related to intermittent ventricular obstruction by a pendulous cyst(5).

Gait disturbance, sudden attacks of leg weakness, drop attacks, fluctuating or progressive dementia and epilepsy are the other symptoms noted.(5)

The commonest neurological findings are pyramidal tract signs and papilledema. Incoordination, tremors are also often noted. Acute and fatal initial attack is a known

feature in nearly 15% of cases(5,6) and was the unfortunate outcome in *Case 2*.

Plain X-ray skull often shows erosion of dorsum sellae and CSF examination reveals raised intracranial pressure along with cellular reaction during cephalegic episodes.

The computerized tomography reveals either a hyperdense (70%) or hypodense (30%), slightly enhancing cyst commonly in the 3rd ventricular roof(7). Hydrocephalus and associated aqueductal stenosis (20%) are also common(8). The differential diagnosis on *CT* Scan includes craniopharyngi-

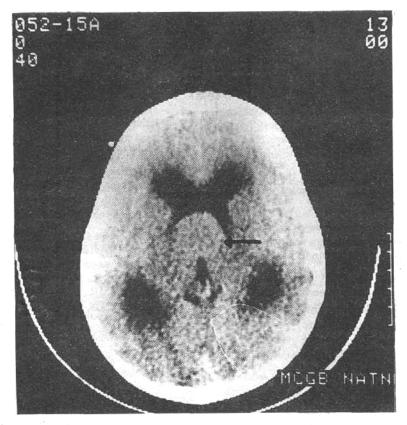


Fig. 2 Isodense lesion without enhancement in Case 2.

oma, cystic glioma, ependymomas and third ventricular meningiomas.

Management modalities differ and include direct excision (transventricular, transcallosal), ventriculoscopic aspiration and stereotaxic microsurgical laser craniotomy with or without biventricular shunting.(9,11)

Confusion, hemiparesis, seizures, Korsakoffs psychosis are well known during postoperative period and even sudden death is reported(2,3). Long term sequelae include optic atrophy, epilepsy, intellectual impairment and precocious puberty(2).

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REFERENCES

- 1. Dastur DK, Lalitha VS. Pathological analysis of intracranial space occupying lesions in 1000 cases. J Neurol Sci 1969, 8: 143-170.
- Pecker J, Gilles G, Scarabin J. Third ventricle tumors. *In:* Handbook of Clinical Neurology, Vol 17, Part II, Ed Vinck-

- en PJ, Bruyn GW. Amsterdam, North Holland Co, 1974, pp 440-475.
- Little JR, MacCarty CS. Colloid cysts of the third ventricle. J Neurosurg 1974, 40: 230-235.
- Youmans JR. Brain tumors of disordered embryogenesis. *In:* Neurological Surgery. Philadelphia, W.B. Saunders, 1982, pp 2899-2935.
- Kelly R. Colloid cysts of the third ventricle. An analysis of 29 cases. Brain 1951, 74: 23-65.
- McKissock W. The surgical treatment of colloid cyst of the third ventricle. A report based upon twenty-one personal cases. Brain 1951, 74: 1-9.
- 7. Alcock M, Roberston A. Magnetic resonance imaging of colloid cyst of 3rd ven-

- tricle. Clin Radiology 1988, 39: 308-339.
- Brun A, Egund N. Cerebral symptoms in colloid cyst. Acta Neurol Scand 1977, 49: 525-535.
- 9. Apuzzo MLJ, Chikorani OK, Gott PS. Transcallosal, interfornical approaches for lesions affecting the third ventricle. Surgical considerations and consequences. Neurosurgery 1982, 10: 547-554.
- Abernathy CD, Davis DH, Kelley PJ. Treatment of colloid cysts of the third ventricle by stereotaxic microsurgical laser craniotomy. J Neurosurgery 1989, 70: 525-529.
- Apuzzo MLJ. Surgery of masses affecting the third ventricular chamber: Techniques and Strategies. *In:* Clinical Neurosurgery. Ed Little JR. Baltimore, Williams and Wilkins, 1988, pp 499-522.

Giant Perirenal Lipoma Masquerading as Wilms' Tumor

B.B. Prerna M.S. Desai

Pure renal and perirenal lipomas are rare. They arise from the renal cortex,

From the Department of Pathology, Seth G.S. Medical College and K.E.M. Hospital, Parel, Bombay 400 012.

Reprint requests: Dr. P.B. Badhe, 11, Bandra Saroj, 225, St. Andrews Road, Bandra, Bombay 400 050.

Received for publication: September 9, 1992; Accepted: October 21, 1993 capsule or perirenal tissue, and may be difficult to distinguish from renal adenocarcinoma or primary malignant renal tumor(1,2). We report an 18-month-old child who presented with a renal mass measuring 30 X 25 X 20 cm, which had radiological and operative findings suggestive of a Wilm's tumor, but proved to be a mature lipoma. To the best of our knowledge, this is the first such reported case in the pediatric age group.

Case Report

An 18-month-old male child presented with a lump in the left flank since 4 months. There was no history of hematuria or any bowel complaints. All laboratory investigations were within normal limits. Ultrasonography showed normal right kidney and a left kidney tumor suggestive of Wilm's