CYST OF A CEREBRAL HEMISPHERE TREATED BY INTRAVENTRICULAR DRAINAGE

DOUGLAS MILLER, M.B.*
Sydney, Australia
(Received for publication October 15, 1951)

It is now 8 years since a large cerebral cyst of unknown pathology, at the time responsible for symptoms of extreme intracranial pressure, was drained into the lateral ventricle. The patient has remained well, and the artificial opening has kept patent, a communication still existing between a cystic space and the ventricular system.
The case is considered to be of unusual interest both from the speculative point of view as to pathology and because of the satisfactory result of a simple form of treatment.

CASE REPORT

The patient was a soldier aged 23 who was well developed and had been quite well until 9 months before admission. During this period he had suffered frontal headache of increasing severity, and at time of admission this was intense.

During the same period he had gradually lost the vision in his left eye, which had become practically blind. More recently his right eye had suffered severely.

During the previous 6 months he had suffered occasional attacks of an uncinate nature described as unpleasant smells and vague indescribably remote memories.

Examination. He was found to have bilateral high-grade papilloedema; perception of light only was present in the left eye and finger counting only in the right eye. There was a slight sustained tremor of the right arm. Otherwise his central nervous system was normal.

X-rays showed some destruction of the clinoid processes. Lumbar puncture pressure was over 400 mm. water; the fluid was normal.

* 185 Macquarie Street, Sydney, Australia.
In view of the paucity of signs a pre-operative diagnosis of a midline lesion was made.

At ventriculography a large high-pressure ventricle was entered on the right and on the left a cyst containing several hundred cc. of pale yellow fluid. This fluid did not clot on standing.

Ventriculograms showed a very large cyst situated in the left parieto-occipital region and occupying most of this part of the hemisphere. There was considerable displacement of the right ventricle (Figs. 1 and 2).

Operation. A large parieto-occipital bone flap was turned down, the dura opened and the cystic cavity found at a depth of 3 cm. from the surface. The cortex was incised and lighted retractors were introduced into the cavity, whose walls could be seen well. The cyst lining was uniformly glistening and smooth, with no suggestion of neoplastic excrescence.

A brain cannula, passed through the medial wall of the cyst, struck the ventricle after passing through about 5 mm. of tissue. This communication was enlarged.

No protein estimation was made of the fluid from the cyst at time of operation as the operation was performed under army service conditions.

Course. He made a good recovery except for permanent and almost complete loss of vision. He is well rehabilitated and leads a useful life. He suffers occasional epileptic seizures.

A recent encephalogram showed a normal ventricular system still communicating with the cystic space in the left hemisphere (Figs. 3, 4 and 5).

His CSF contained 50 mg. of protein.
ADAMANTINOMA PRESENT AT BIRTH

SUMMARY

A case of a large hemispherical cyst of unknown pathology is reported. It presented with anomalous clinical features. It was treated by simple intraventricular drainage. Encephalograms made 8 years later show the communication still in existence.

CASE REPORT OF AN ADAMANTINOMA PRESENT AT BIRTH

C. G. SUBRAMANI IYER, M.D.*

Neurological Unit, Boston City Hospital, and the Department of Neurology, Harvard Medical School, Boston, Massachusetts

(Received for publication October 23, 1951)

A perusal of the available literature has not revealed any instance of the presence of a pituitary adamantinoma at birth. The following remarkable case is therefore placed on record.

Clinical History. The patient M., a girl, was the sixth child born to a mother whose prenatal history was not remarkable. The mother's blood was Rh positive. X-rays before birth revealed a very large fetal head. The mother was admitted to Boston City Hospital in labor on Mar. 1, 1951 with a B.P. of 140/100 and edema of the ankles. Urinalysis revealed 2+ albumin. In order to facilitate birth a lumbar puncture needle was inserted through the top of the presenting head into the lateral ventricle and xanthochromic fluid was permitted to drip out for about 2 hours. This reduced the head to approximately a third of its previous size and delivery was effected by low transverse caesarian section.

Examination. At birth the baby breathed normally and was noted to be in good condition. The heart rate and rhythm were normal and color of the skin was good. The head was markedly enlarged, somewhat asymmetrically with a parietal bulging on the left. The left parietal and temporal bones were extremely thin. Bilateral proptosis and lateral nystagmus were noted. The Moro reflex was sluggish; the deep tendon reflexes were all obtained and there was fanning of the toes on overcoming the feet. The cry was high-pitched. The weight of the child at birth was recorded as 8 lbs. 14½ oz.

Laboratory Data. Hb. was 14.5 gm./100 cc.; RBC 7.6 million; WBC 6550/c.mm., with 48 per cent neutrophilic leucocytes, 46 per cent lymphocytes and 11 per cent eosinophils. Occasional nucleated erythrocytes were seen in the blood smear. The platelets appeared normal. The CSF 5 days after birth was slightly xanthochromic; protein was 40 mg. and chloride 690 mg. per cent. There were 260 red cells and no leucocytes/c.mm. of fluid. The sugar value was reported as too low to read. The ventricular fluid was also xanthochromic, with 2000 mg. of protein and 642 mg. of chloride/100 cc. There were 380 red cells and no leucocytes/c.mm. of fluid. The sugar was again reported as too low to read. Radiographs of the head showed a marked expansion of the skull in all dimensions, consistent with hydrocephalus. In one film (anteroposterior projection) a round patch of increased density to the right of the midline was observed.

Course. A few days after birth the baby became deeply jaundiced but this cleared up rapidly. Subsequent ophthalmoscopic examination revealed pale optic discs bilaterally; the disc margins were well defined and there was no trace of papilledema. During the following weeks there was a progressive enlargement of the head and all four extremities became spastic. Throughout the patient's life, all of which was spent in hospital, the temperature was normal, except for occasional elevations to 100°F. and depressions to 95°F. The child died at the age of 3 months.

* Rockefeller Foundation Fellow from Indian Council of Medical Research, Neuropathology Unit, Tata Memorial Hospital, Bombay, India.