SUCCESSFUL REMOVAL OF INTRAVENTRICULAR ANEURYSM
OF THE CHOROIDAL ARTERY

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Tumors within the ventricular system of the brain have been thoroughly documented by numerous authors and, in recent years, intracranial aneurysms have gained an increasingly prominent place in the medical literature. An aneurysm of the distal portion of the choroidal artery is a rarity. When such a lesion reaches sufficient size to form an intraventricular mass, it is worthy of mention. The case report herein presented deals with just such a lesion.

REPORT OF CASE

D.S., a 27-year-old Puerto Rican female, was admitted to Beth David Hospital on Dec. 15, 1953. She complained of frontal headaches of 1 year's duration. They had been most frequent on arising in the morning, only occasionally coming on later in the day, and were usually relieved by aspirin. Two weeks prior to admission the headaches became constant, increasingly severe and were unrelieved by medication. She had nausea, vomiting and anorexia. Her vision became blurred and "cloudy." Occasionally she complained of diplopia.

Examination. She was a well developed, well nourished, acutely ill, cooperative female. The right pupil was larger than the left and reacted sluggishly to light. A severe degree of papilledema was present bilaterally with hemorrhages and exudates. There were no localizing neurological signs.

The clinical impression was midline tumor in the third or fourth ventricle.

Ventriculography was performed on Dec. 19, 1953. Needles were passed into the lateral ventricles through occipital burr holes. Thirty cc. of clear colorless fluid escaped under greatly increased pressure. An equal amount of filtered air was instilled in small amounts alternately through each needle. The wounds were closed in layers with black silk sutures. Roentgenograms revealed a mass in the posterior portion of the left lateral ventricle with a shift of the ventricular system to the right (Figs. 1 and 2).

Operation, Dec. 19, 1953. Through a reverse Frazier type of flap in the left parieto-occipital area the underlying dura mater was exposed and found to be extremely tense. The patient was given 50 cc. of 50 per cent glucose and 0.5 gm. of caffeine sodium benzoate intravenously. A 1 mm. incision was made in the dura mater and brain. A cannula passed into the ventricle allowed air and fluid to escape, reducing the intracranial tension. The dura mater was then opened with the base of the flap toward the midline. The cannula was again inserted along the previous tract and at a depth of 5 cm. a firm rubbery mass was encountered. A circular area of the cortex—6 cm. in diameter—in the posterior parietal region was cauterized, the major vessels were clipped and cut, and a cone of cerebral tissue was removed to the ventricle. A dark red mass was seen at the depth of the opening. This mass was well encapsulated and firm, and was not adherent to the lining of the ventricle. With traction and the aid of a brain spoon it was possible to deliver the mass through the opening in the brain. During this maneuver a point of attachment could not be seen. However, with palpation along the inferior and medial edge of the tumor, a large blood vessel was felt. Before this could be clipped it was torn. The mass was quickly delivered and a large bleeding point was compressed through cottonoid
packing. It was then possible to clip and cauterize the bleeding vessel without serious loss of blood. This was a medium-sized artery in the choroid plexus of the ventricle. After the bleeding had been well controlled with cautery, clips and gelatin foam, the dura mater and flap were repaired in layers with interrupted black silk sutures. Split catheter drains were left in place beneath the bone flap and scalp.

Postoperative Course. During the first 48 hours the patient was irrational and exhibited a right hemiplegia. She began to improve thereafter. A right homonymous hemianopia and a moderate degree of aphasia were present. She could carry on simple conversations but anomia, alexia and acalculia were readily demonstrated. On Dec. 30, 1953 she was allowed out of bed. She walked with a hemiparetic gait on the right. She was transferred to Montefiore Hospital for rehabilitation.

FIG. 3. Photographs of aneurysm. (A) The outer surface is smooth. (B) Lamellated tissue is seen in wall surrounding the central cavity. (C) A portion of the specimen viewed on edge.