Lipoma of the Corpus Callosum

Case Report

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It is a recognized fact that lipomas rarely occur in the brain. Half of these are located in the corpus callosum.24 Rokitansky18 discovered the first case accidentally at autopsy in 1856. From then until 1939, when Sosman21 made the first diagnosis during life, these tumors were being reported only as incidental autopsy findings.

Zettner and Netsky24 reviewed the reported cases in 1959, and recorded 59 cases up to that date. In 1962, Cooper and Von Hagen4 added 5 more cases;5.11.17.20 one more of their own made a total of 65 cases. Since then 4 more cases1.3.12.19 have been reported making a total of 69 cases to date.

Case Report

A.S., a 42-year-old white woman was referred to us by Dr. Wallace Cone because of intermittent headaches which had become worse over the past 6 months. A previous ophthalmological examination, including visual fields, visual acuity, and fundi, had been normal. She had experienced hot flashes and nervousness for the past 8 months but still was having fairly regular menstrual periods. She had 1 child, 5½ years old, and had had no other pregnancies. For many years she weighed over 200 pounds. In 1952, she had had a cyst removed from the left ovary. Her mother was a diabetic.

Examination. General physical examination was normal except for obesity. The blood pressure was 150/90. There was no papilledema; spontaneous pulsations were noted in the right fundus. All cranial nerve functions, including extraocular movements, were normal. Except for a questionable left Babinski response the remainder of the neurological examination was normal.

Laboratory Data. X-rays of the chest and cervical spine were normal. The EKG was normal. Endocrine studies including 17 ketosteroids were within normal limits. Serologic tests for syphilis were negative. Blood studies were within normal limits. X-rays of the skull (Fig. 1 a and b) revealed a large, partially calcified ovoid mass in the midline. The sella turcica was normal. An electroencephalogram was diffusely abnormal. A left carotid angiogram (Fig. 2) revealed a large anterior cerebral artery but was otherwise normal. A brain scan showed no uptake of Mercuriodyrin 908. In the next few days, the patient developed early papilledema. Ventriculography (Fig. 3) revealed a midline mass in the region of the septum pellucidum and corpus callo-

Fig. 1. (a) X-ray of skull showing midline ovoid calcification. (b) Lateral x-ray showing calcification in region of corpus callosum.

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sum. This was thought to be a tumor of the corpus callosum. The possibility of agenesis of the corpus callosum was suggested since the 3rd ventricle was rather high.

Operation. A right frontal craniotomy was performed with the presumptive diagnosis of lipoma of the corpus callosum. A tunnel was made through the right frontal lobe into the frontal horn of the lateral ventricle. This maneuver exposed a mass bulging into the lateral ventricle and suggesting a tumor of the septum pellucidum and corpus callosum. Biopsy confirmed the diagnosis of lipoma (Fig. 4). The postoperative course was satisfactory but she still complained of headaches. This was interpreted as partial ventricular obstruction and compression of the aqueduct; a Torkildsen procedure was performed several days later. When she was discharged approximately 1 month after admission, her headaches had completely disappeared.

Discussion

Dandy\(^7\) in 1945 said, “As far as I know, there has never been a case of lipoma in the brain found in an operation.” Since then a number of lipomas have been verified at operation, and the clinical, roentgenological, anatomical, and pathological aspects have been adequately discussed.\(^1\text{–}^{10},\ 13\text{–}^{16},\ 22,\ 23\)

This case is similar to many others reported with complete diagnostic studies except that it is one of the first to have had a brain scan. As might have been anticipated, the scan was negative. The patient had no associated anomalies except a possible agenesis of the corpus callosum suggested by air study. The only psychiatric manifestation observed in this patient was that of euphoria. She has been seen approximately every 2 months during the year since her discharge. She has been doing very well, and has no headache, or papilledema. She is still euphoric.

Summary

We have reported a case of lipoma of the corpus callosum diagnosed, explored, and verified during life. A preoperative brain scan was negative. Ventriculography suggested partial agenesis of the corpus callosum. The symptoms of obstructive hydrocephalus were relieved by a Torkildsen procedure.
References


