CAVERNOUS HEMANGIOMAS OF THE CEREBRAL HEMISPHERES*

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The classification of vascular lesions of the brain is a very controversial topic. In the literature the same type of tumor may be listed by various authors under different names. In this paper 3 cases of well encapsulated vascular tumors, “cavernous hemangiomas,” are presented. The differentiation of these tumors from other vascular lesions is most important clinically because of the ease of successful surgical removal.

CASE REPORTS

Case 1. B.T., 33 years old, a right-handed woman, was admitted to the University of Michigan Hospital on Sept. 11, 1956 because of headaches. Seven years previously, at the time of the birth of her first child, she began to have throbbing headache over the vertex which radiated forward to the mid-frontal area. Intermittently the headache was accompanied by nonprojectile vomiting, true vertigo, and transient loss of vision. Her physician made a diagnosis of migraine headaches and treated her with ergotamine with some symptomatic relief. Severe headaches occurred four to five times a year and were accompanied by a residual pain in the left temporal area. Fourteen months before admission she began having generalized tonic and clonic seizures lasting about a minute. These seizures were preceded by a premonitory headache and were followed by transient visual loss and a postictal stupor of half an hour’s duration. There was also mental confusion. During the 2 months prior to admission she had had impairment of memory and difficulty in expressing herself. Her menses had been irregular and she had been told that she had a uterine fibroid.

The only positive findings on neurological examination were a Grade 1 papilledema bilaterally and a partial left homonymous hemianopsia. On physical examination a mass was noted on the anteromedial portion of the left tibia which the patient stated had been present for a period of 13 years. The lump on the tibia had become painful at the time of her menstrual periods. Roentgenograms of the left tibia revealed a thickening of the periosteum immediately overlying this mass. An electroencephalogram revealed a right posterior temporoparieto-occipital focus which was suggestive of a malignant neoplasm. A right internal carotid arteriogram showed evidence of a right posterior temporoparietal brain tumor. Unfortunately, the lateral view of the arteriogram has been misplaced and cannot be reproduced in this paper. Roentgenograms of the chest were negative.

On Sept. 17, 1956, ventriculography was attempted and upon inserting a ventric-
ular needle at the right posterior parietal area to tap the ventricle, a firm mass was encountered. A right temporoparietal osteoplastic craniotomy was performed with excision of a well encapsulated mass, 6 cm. by 8 cm. in size (Fig. 1). The lesion was noninvasive and had very few blood vessels entering the capsule. It was easily “shelled out.”

On Oct. 3, 1956 the lump over the left tibia was biopsied and the pathologist reported a fibrohemangioma.

The patient was discharged Oct. 7, 1956. She had a complete left homonymous hemianopsia as her sole residual neurological deficit.

*Gross and Microscopic Description.* The specimen was covered by a thick fibrous smooth membrane with several dome-shaped exuberances. The cross section showed numerous cavities of various size which were separated by thick septa. Microscopic

Fig. 1. Case 1. Gross appearance of the tumor.

Fig. 2. Case 1. Small blood-filled cavities lined with endothelium.