PTERIONAL MENINGIOMA "EN PLAQUE"

REPORT OF A CASE OF THIRTY-SIX YEARS' DURATION

KENNETH H. ABBOTT, M.D.,* AND BERNARD GLASS, M.D.

Department of Surgery, Division of Neurosurgery, College of Medicine, Ohio State University Hospitals, Columbus, Ohio

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With the rapid increase in the numbers of neurosurgeons and neurosurgical operations performed, the patient who has harbored an intracranial tumor for many years is indeed becoming a stranger in our midst. To the pioneers in this field such a patient was not a rarity but today's younger generation of neurosurgeons seldom encounters one. It may be worth while, therefore, to report a single case in which the tumor is known to have been present some 36 years and in which the diagnosis was made by a noted general surgeon 30 years prior to its removal. As may rightfully be suspected, the tumor was a meningioma arising from the lesser wing of the sphenoid with extensive hyperostosis of this bone and associated walls of the orbit.

REPORT OF CASE

The patient was a 59-year-old female referred to us on June 16, 1952 because of a right proptosis, ophthalmoplegia, progressive loss of vision (OD) and right facial disfigurement.

History. About 1916 she began to notice a slight right proptosis, but her family physician did not think enough of this to advise consultation until 1932, when she was referred to Dr. George Crile, Sr. of Cleveland, Ohio with a diagnosis of hyperthyroidism.

The patient relates that she was sent home with a diagnosis of "a tumor behind the eye," and that an operation was not indicated because "it would surely kill me." The exact context of this conversation, of course, was not recorded. However, through the courtesy of Dr. W. James Gardner, we have obtained a copy of the report sent to the referring physician on June 19, 1928:

Dear Doctor C.

Your patient, Mrs. V.B., came in a few days ago and upon examination we find she has a unilateral exophthalmos. I had a suspicion that it might be due to something in the cranium and accordingly she was referred to the Medical Department and X-ray Department and an osteoma was found to be present.

The osteoma is benign and I think it would be just as well to leave the matter for observation. Of course, this picture resembles hyperthyroidism with unilateral exophthalmos. However, the demonstration of the osteoma has put the other construction upon it. Under the circumstances it would seem best to leave both the hyperthyroidism and the osteoma for further consideration.

(signed) G. W. Crile, Sr., M.D.

Fearing this too serious for surgical intervention, nothing further was done about it until June 1952. During these 30 years the proptosis became very slowly more pronounced, but she did not notice any serious loss of vision in the right eye until the summer of 1951, and during the following spring a slight visual loss was noted in the left eye. By the spring of 1952 severe and painful proptosis of the right eye was present with total unilateral ophthalmoplegia (Fig. 1). In the 3 months previous to our examination, a left hemiparesis had slowly de-
veloped with "secondary arthritic" involvement of the joints of the extremities (upper more than lower) and Dupuytren's contractures in the left hand became evident. Her daughter reported that the patient's "memory had been fading for a year" with marked personality changes for 8 months.

Examination. The patient's mental processes were somewhat dulled. She displayed "senile irritability" and complained constantly and bitterly of pains in her head and right eye.

X-rays of the skull (Fig. 2) disclosed an enormous hyperostosis involving the lesser wing of the right sphenoid, the orbital and cribriform plates, the pterional region and even the zygoma, maxilla and petrous bone. Right carotid angiography (Fig. 3) aided in determining the size of the tumor mass and in locating the origin of its major blood supply.

Operation. The tumor mass was of moderate size compared to the many years it had been growing, measuring in its AP diameter approximately 7 cm. inferiorly (along the floor of the middle fossa) to about 3 cm. or 3.5 cm. superiorly. Medially, it extended over the tuberculum sellae beneath the chiasm to the left of the midline. The lesser wing of the sphenoid and the orbital plate were enormously thickened. The combined mass of the "free" tumor and the hyperostosed bone was of no little size and consequently had caused considerable atrophy of the right frontal lobe. The "free" tumor mass was of very soft consistency, allow-

Fig. 1. Preoperative photograph showing marked proptosis in patient with pterional meningioma of 36 years' duration.

Fig. 2. (left) Posterior-anterior roentgenogram disclosing severe right-sided hyperostosis of the lesser wing of the sphenoid, pterion, orbital roof, maxilla and petrous bone.

Fig. 3. (right) Anterior-posterior cerebral angiogram disclosing marked distortion of the carotid siphon, and middle and anterior cerebral arteries by the tumor.