CASE REPORTS AND TECHNICAL NOTES

BILATERAL SYMMETRICAL ANEURYSMS OF INTERNAL CAROTID ARTERY WITHIN THE CAVERNOUS SINUS

CASE REPORT

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Bilateral aneurysms of the internal carotid artery within the cavernous sinus of nontraumatic origin are a rarity, judging by the very few cases of such lesions reported in the literature. Since Sir Gilbert Blanc's report of a case in the year 1800, to our knowledge only 10 cases have been described. In only 2 of these 10 cases were bilateral aneurysms suspected and diagnosed ante mortem. In 1 the diagnosis was made by angiography, but in view of the patient's advanced age, surgery was not performed; the diagnosis was proven later at autopsy. In the second case, the diagnosis was made by roentgen ray, which showed bilateral parasellar calcifications, but it was never proven. In 2 cases the bilateral aneurysms were incidental autopsy findings. Unilateral aneurysms were diagnosed clinically in 4 cases in which later, at autopsy, bilateral aneurysms were found. In one case there was a cavernous sinus fistula on one side, which may have been traumatic, and an aneurysm on the other side; these were proven by angiography. In another case, which appeared in the French literature in 1949, aneurysms within the cavernous sinus were found at autopsy, but being unable to obtain the journal, we do not know whether the diagnosis was suspected or proven ante mortem.

In the case presented herein, the diagnosis was proven by angiography. It is reported for its interest and its statistical value.

CASE REPORT

M.H., a 47-year-old white female, was first seen in the outpatient medical clinic of Akron City Hospital on Nov. 2, 1955, with a complaint of sudden onset of left supra- and periorbital headache about 3 weeks previously. The headache, which had lasted 3 days and disappeared as suddenly as it had come, was not altered by salicylates. Shortly after the headache appeared she noted a medial deviation of her left eye. There was no history of trauma. The past medical history was noncontributory.

Examination revealed a blood pressure of 200/120 and weakness of the left 6th nerve. There was no exophthalmos and a bruit was not audible. The fundi were normal. Visual acuity was 20/40 in the right eye; vision in the left eye was markedly blurred. Roentgenograms of the skull were normal. Blood count and urinalysis were normal except for a 2-plus urine albumin. Blood test for venereal disease was positive up to 1:32 dilutions. A course of penicillin therapy was instituted because of the positive serology.

Examination on Feb. 8, 1956 revealed left supraorbital and corneal hypesthesia, ptosis of the left lid, dilatation of the left pupil, and complete left extraocular palsy. V.O.S. was 20/30. She complained of throbbing left frontal headache. At no time did she show any signs referable to involvement of structures within the right cavernous sinus.

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Admission to Akron City Hospital, Feb. 8, 1956. A lumbar puncture was performed; the pressure, appearance, hydrodynamics and laboratory findings were all normal. Orbital roentgenograms were normal. Continuous compression of the left carotid artery for 10 minutes resulted in a slight improvement in the ptosis for the period of the arterial compression.

On Feb. 13, 1956, using 35 per cent Diodrast, a left carotid arteriogram showed a large aneurysm in the cavernous sinus portion of the left internal carotid artery (Fig. 1).

On Feb. 15, 1956, using 35 per cent Diodrast, right carotid arteriography with simultaneous compression of the left carotid artery to check collateral circulation was done. This showed an aneurysm of the right internal carotid artery similar in size and position to that on the left. Satisfactory collateral circulation was demonstrated (Fig. 2).

1st Operation. On Feb. 17, 1956, under local 1 per cent procaine anesthesia, a tantalum clip was placed around the left internal carotid artery in the neck. During the dissection of the structures of the carotid sheath it was necessary to administer some Pentothal sodium intravenously. The clamp was closed completely. The patient's response to pinpoint stimula-