CASE NOTES

INTRA-ORBITAL MENINGIOMA OF THE OPTIC NERVE*

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MENINGIOMATA arising from the optic nerve sheath within the orbit are described by Walsh (1947) as being extremely rare, and more recently by Craig and Gogela (1949) of the Mayo Clinic as comparatively rare. These authors reported nine cases in which the tumour arose from the optic nerve within the orbit, three in which it arose from the nerve within the optic foramen, and five in which it appeared to arise from some structure within the orbit other than the optic nerve. Duke-Elder (1940) comments on this rarity.

It was therefore thought worth while to report an additional case, particularly as the present one showed some unusual features.

Case Report

A boy, aged 6 years, attended on September 25, 1950 with the history that the left eye had been turned inwards from birth until the age of 3 years, after which it had diverged.

Examination.—Vision in the right eye was 6/5, but in the left eye there was no perception of light. There was no proptosis. The eye was fixed in the orbit and practically immobile.

In the fundus a raised white mass, three disc diameters across was seen protruding into the vitreous and obscuring the optic nerve head. Surrounding the tumour were patches of choroidal atrophy (Fig. 1). The Wassermann reaction, complement-fixation test for hydatid, and the Casoni test were negative. X-ray examination of the optic foramina on October 10, 1950, did not reveal any enlargement.

Operation.—Excision of the left eye was performed on October 9, 1950, and it was found impossible to excise all the optic nerve involved by the tumour.

The child was therefore referred to the neurosurgical department of St. Vincent's Hospital, where a small residual piece of the tumour was removed through a left frontal osteoplastic craniotomy by Mr. F. Morgan on May 24, 1951. An x-ray of the left optic canal made on May 22, 1951, showed that it was now larger and more circular than the right. Convalescence was uneventful.

Pathology.—The tumour was 5 mm. in diameter and had involved the choroid for a distance of 7 mm. around the optic disc. Histologically the tumour was composed of

FIG. 1.—Fundus drawing showing large tumour of optic nerve and patches of choroid atrophy.

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flattened cells with oval or elongated nuclei and a fine chromatin meshwork. The cells were aggregated in whorls, many of which showed calcification (Fig. 2).

FIG. 2.—Portion of tumour showing whorls. $\times 130$.

COMMENT

Duke-Elder (1940), in discussing the spread of meningiomata of the optic nerve, states that involvement of the choroid is exceptional. In this case, choroidal involvement by the tumour was obvious ophthalmoscopically, and the choroidal disturbances and pigmentation surrounding it may have been due to the vascular disturbance it occasioned.

This patient was exceptionally young; Craig and Gogela (1949) found the average age incidence to be 41 years, though Walsh (1947) mentions an earlier age.

The increase in size of the optic foramen which was demonstrated radiologically is interesting in that it occurred over a period of 7 months, and indicated the origin of the tumour from the nerve within the orbit. Histologically the tumour was a vascular meningioma, of the psammomatous type, as described by Reese (1951).

I wish to thank Dr. R. Stott, under whose care this patient was admitted to the Victorian Eye and Ear Hospital, for the clinical notes.

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