CASE NOTES

TOXOPLASMIC CHOROIDO-RETINITIS IN THE ADULT*

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NUMEROUS cases of toxoplasmosis of congenital origin have been reported since the work of Sabin and Olitsky (1937) and the case of Wolf, Cowen, and Paige (1939). Sabin (1950) has stated that there is no conclusive evidence that choroïdo-retinitis as a manifestation of toxoplasmic infection can occur after birth. Wilder (1952), on the other hand, has found organisms morphologically similar to toxoplasma in pathological sections of adult human eyes with granulomatous choroïdo-retinitis. Duke-Elder, Ashton, and Brihaye-Van Geertruyden (1953) have reviewed the recent literature on the subject, and have themselves reported a case of granulomatous choroiditis in which the vision was destroyed, and in which secondary glaucoma eventually necessitated the excision of the eye. The histological diagnosis of chronic granulomatous choroïdo-retinitis, probably tuberculous in origin, was made. 21 months later, in view of Wilder's findings, the sections were re-examined, and crescentic structures morphologically indistinguishable from toxoplasma were found. Koke (1953) reports the first case in which active choroïdo-retinitis probably due to toxoplasmosis was observed in an expectant mother who 2 weeks later gave birth to a female child with extensive intra-ocular disease, intra-cranial calcification, and positive serological tests for toxoplasmosis.

The present report provides further evidence that a primary choroïdo-retinitis can occur in the adult as a result of toxoplasma infection.

Case Report

A man, aged 35 years, first came under observation in November, 1951, when he was referred by his general practitioner to the Out-Patients' Department at Moorfields on account of active choroiditis of 2 weeks' duration. The patient's own history was of a black spot in the right field of vision for a fortnight before the examination. There was no previous history of any eye trouble nor of any interference with vision.

Examination.—In the right eye the anterior segment was normal, and there were no cells in the retrolental space. There was a fine vitreous haze, and a small woolly patch of active choroïdo-retinitis above the macula, of about a half disc diameter in size. The visual acuity was 6/9 unaided.

The left eye was normal with visual acuity 6/6 unaided.

Diagnosis.—The patient was admitted to hospital for investigation and treatment. X rays of the sinuses and chest were negative. The Wassermann reaction, gonococcal

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complement-fixation test, white blood count and differential count, and erythrocyte sedimentation rate all gave negative results. A toxoplasma serum test gave a positive result for both the cytoplasm modifying dye test (1:30) and complement-fixation test (1:20).

Treatment.—Local treatment with atropine and short-wave diathermy was given, followed by a course of systemic cortisone, given first by intra-muscular injection and then by mouth. The patient was discharged from hospital on December 13, 1951.

Subsequent Progress.—On discharge, the unaided visual acuity was only 6/24 in the right eye. A month later the corrected visual acuity was recorded as 6/18. At this stage, treatment with short-wave diathermy was discontinued, but the atropine was prescribed for a further month.

Four months after the onset, the visual acuity of the right eye had recovered to 6/9 corrected ($+1.00 \times 90^\circ$), the vitreous was clear, and the choroido-retinal lesion appeared as a healed scar just above the macula (Figure).

FIGURE.—Healed choroido-retinitis near right macula.

Follow-up.—A year later, on routine follow-up, further blood was taken for toxoplasma serum tests, and a cytoplasm modifying dye test titre of 1:800 was found, with a complement-fixation titre of 1:40. An x ray of the skull taken at the same time showed no abnormality.

The Table (opposite) shows titre values for both serological tests, taken at monthly intervals since the high titre was first observed. The serial tests show a gradual fall in titre for both the cytoplasm modifying dye test and the complement-fixation test over the period of observation.

A periodic examination of the right fundus has shown no change in the choroido-retinal lesion since it was recorded as healed in March, 1952.

TABLE

Date	Cytoplasm Modifying Dye Test	Complement-Fixation Test
November, 1951	1:30	1:20
March, 1953	1:800	1:40
April, 1953	1:330	1:16
		1:32 (partial)
May, 1953	1:160	1:32
June, 1953	1:120	1:40
July, 1953	1:80	1:120

Conclusions

A case of choroïdo-retinitis in an adult, probably due to toxoplasmosis, is recorded. The evidence is both clinical and serological. There was no previous history of eye disease nor had the patient observed the symptoms of which he complained at the time of examination. A localized patch of active choroïdo-retinitis was seen when the patient was first examined, and this subsequently became a healed, quiet lesion. A titre level for toxoplasma of 1:30, which is not regarded as a significant level in the patient's age group, rose later to 1:800, a highly significant figure, during the period of follow-up. This has since gradually fallen towards the low titre level of the original test. The possibility of an anamnestic reaction to account for the rise in titre must not be overlooked, but there is nothing in the patient's history to confirm that any significant febrile illness occurred in the interval.

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