OCULAR INVOLVEMENT IN ACQUIRED TOXOPLASMOSIS*†

BY

T. G. RAMSELL

Nuffield Laboratory of Ophthalmology and Oxford Eye Hospital

AND

B. A. GAMERO

Radcliffe Infirmary, Oxford

ACQUIRED systemic toxoplasmosis has been increasingly diagnosed in recent years, but chronic ocular manifestations rarely complicate the systemic disease (Wising, 1952; Wright, 1957; Perkins, 1958). The existence of an acquired form of toxoplasmic choroido-retinitis was suspected after the discovery of congenital toxoplasmosis in 1937, but was not finally proved until 1952 (see Hogan, 1964). Two cases of the pulmonary type with ocular complications were reported by Hogan (1964), and two cases with systemic disease of the lymphadenopathic type in which choroido-retinal lesions were found, although the patients were asymptomatic, were presented by Martenet and Pestalozzi (1961).

This paper presents a case of acquired systemic toxoplasmosis of the lymphadenopathic type, with ocular involvement, which is the first to be reported in the English literature.

Case Report

A 44-year-old male gas welder came to the Ear, Nose and Throat Department of the Radcliffe Infirmary on November 23, 1964, complaining of a lump in his neck which had been present for 9 days; this was associated with a sore throat. There were no other complaints.

Examination.—There was a soft non-tender gland about 1 cm. in diameter behind the angle of the left side of the jaw; there were one or two other glands of similar consistency just anterior to the upper end of the left sternomastoid muscle.

Investigations.—A chest x ray was normal. The blood film showed 6,000 white blood cells: "There is a slight mononucleosis and some of the cells are of abnormal morphology. The appearances are not very suggestive of glandular fever, though this is not excluded".

Paul Bunnell test negative; erythrocyte sedimentation rate 8 mm./hr.

The glandular swelling remained unchanged and the patient was admitted to hospital, where a biopsy of the cervical gland was performed.

The histological report was as follows:

"The histological appearances are compatible with a fragmented lymph node in which reactive inflammatory changes are present. Scattered in the medullary tissues are numbers of pale histiocytic cells and these are sometimes present in irregular collections. Superficially they resemble tubercles but there are no giant cells and there is no evidence of caseation. The histological appearances are those of a lymphohistiocytic medullary reticulosis and are suggestive of a reaction in lymph node due to toxoplasmosis".

Treatment.—Sulphamethazine tablets 0.5 g. four times daily were started 9 days later. A toxoplasma dye test (reported 15.2.65) was positive 1 : 4096.

After 5 days a severe skin reaction developed and treatment was stopped. Although the patient did not complain of his eyes, he was seen at the Oxford Eye Hospital on February 2, 1965.

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† Address for reprints: Nuffield Laboratory of Ophthalmology, Walton Street, Oxford.

Ocular Examination.—The visual acuity was 6/4 (unaided) in each eye. The left fundus was normal. The right fundus showed a small active lesion below the macula. This consisted of an area of choroiditis with irregular fluffy non-pigmented edges, being less than one-quarter disc diameter in size. The adjacent retina and vitreous showed no abnormality. The central visual fields were normal.

Treatment.—Pyrimethamine ('Daraprim'), 25 mg. twice daily and Prednisolone 30 mg. daily were given. After 3 days, the Daraprim was reduced to 25 mg. daily.

Progress.—One month later the neck glands were unchanged and the toxoplasma dye test was still positive 1 : 4096. One week later the gland was noted to be slowly decreasing in size, and the commencement of pigmentation was noted around the area of choroiditis. The dye test titre was unchanged. The blood film (as on all other occasions) was normal. The dye test titre was still unchanged after a further week and treatment was changed to Spiramycin tablets 2 g. daily for 8 weeks, Daraprim tablets 25 mg. on alternate days, and Prednisolone tablets 15 mg. daily.

After 10 days the neck gland was markedly reduced in size but the dye test titre did not change until March 30, 1965, when it was positive 1 : 1024. The choroidal lesion was more pigmented. The Daraprim treatment was discontinued.

Result.—By May 25, 1965, (*i.e.* 6 months after first presentation) the neck lesion had completely cleared and the choroidal lesion appeared quiet. Treatment was reduced and then stopped. The dye test titre fell to positive 1 : 256, at which level it remained on three subsequent occasions during the following 6 months.

Summary

A case is presented of a man with the glandular form of acute, presumably acquired, toxoplasmosis. He had no complaints except a lump in the neck. At no time did he feel ill and he had no visual symptoms. Nevertheless, there was evidence of a small focus of choroidoretinitis below the macula in one eye. He responded well to treatment.

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