

QUININE AMBLYOPIA WITH SPONTANEOUS DETACHMENT*

BY

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History.—Private F. T., aged 29 years. First reported sick on November 25, 1944, with general malaise, headache, anorexia for three days. Temp. 101° , Pulse 105 . Admitted as P.U.O. and regarded as malaria because spleen was enlarged. Placed on quinine (dosage not recorded but assumed to be the usual gr. 10 t.d.s.). Temp. rose to $104^{\circ}\pm$ and he became mentally confused. Blood slide negative for malarial parasites. On November 26 he became deaf, confused, pupils dilated and not reacting, temp. had dropped to $98^{\circ}+$. Quinine was continued. On November 27 temp. was still down, still confused, pupils still dilated and fixed, quinine was stopped and mepacrine begun. He was transferred to a general hospital, on admission (November 28)—confused and delirious with hallucinations and loosely organised delusional system; temp. 101° , spleen enlarged no organic nervous signs apart from pupils; lumbar puncture clear. Became very dehydrated and given 1V glucose and saline (5 pints).

Eye condition.—(Examined December 4—9 days after onset of illness.) Denies perception of light, pupils both semi-dilated but they do react sluggishly both directly and consensually, he blinks if a hand be moved before face care being taken to avoid air current exciting corneal reflex. Ocular movements normal.

Fundus. (R). Blurred edge of disc except temporally, not pale, arteries extremely small, they are scarcely visible away from the disc. (L). Disc is definitely pale particularly nasally, temporal edge a little blurred. Arteries as in R. eye. Inhalation of amyl nitrate had no effect on the calibre of the vessels.

Two days later the (L) retina was seen to be detached above the nerve head, 5.D., detachment limited to the area immediately above and extending from "10 o'clock to 3 o'clock." Ergotamine ethanosulphate, 1 mgm. t.d.s., was started and continued for two days (no hole seen in detachment). On December 8 (13 days after onset and commencement of quinine) patient found he could see a little, O.E. (R) eye counts fingers at 1 metre, loss of colour vision (describes an orange as grey), field restricted to fixation, pupil still very sluggish, disc now getting pale, vessels as above. (L) eye vague p.l., only disc paler than (R), vessels and detachment as before. The picture is one of primary optic atrophy.

December 16 (21 days after onset). (R) = C.F. at two metres.

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(L) = C.F. just. Detachment is shallower. Patient now quite rational since December 8 when vision returned. December 18 as above.

Discussion.—This case is thought worth reporting because of the detachment which occurred eleven days after the onset.

Diagnosis.—Rests between a toxic amblyopia due to quinine and retro-bulbar neuritis occurring in acute encephalitis. The history of quinine having been given, the vascular changes, the deafness and the residual extremely contracted fields favour quinine. There is no exact record of the exact amount of the drug given but he was on it for two—three days and the administration of thirty grains a day is standard treatment in the Army—so that it is reasonable to assume that he received between 60 and 90 grs. (It is a pity that he was kept on the drug in spite of the toxic signs seen within twenty-four hours.)

Treatment.—He was seen too late for paracentesis to have been of value. Amyl nitrate had no effect on the vessels, nor did the ergotamine ethanosulphate, the improvement which occurred after its administration was probably *post* and not *propter hoc*.

The detachment.—This was restricted to the worse eye and was only present in the area immediately above the disc, it extended upwards for a distance equal to one disc diameter, the lower edge overhung the upper margin of the disc, no hole was visible. The finding on December 16 (detachment shallower) was faulty, while under observation it did not vary.

Summary.—A case of severe quinine toxic amblyopia, with a spontaneous detachment and severe atrophy is reported.

A SIMPLE DEVICE FOR TESTING DIPLOPIA*

BY

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THE requisites of a suitable test object in investigating diplopia are as follows:—

- (1) It should have a bright, easily recognisable appearance.
- (2) Its form should be linear so that the smallest separation or tilting can be easily noted.
- (3) It should be turnable to all directions so that vertical separation can be easily noted as horizontal cases.

The simple device illustrated serves these purposes. It fits to the Hamblin Ophthalmoscope lamp handle and consists of an arrow perforated tube closed at the top and cut-away in its posterior wall so that a flat sloping surface painted white reflects the internal light

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