ANGIOMA OF THE RETINA*

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DUKE-ELDER in his Text-book of Ophthalmology, Volume III, states that decision has not yet been reached regarding the relative merits of radium, radon seeds, roentgen therapy, electrolysis and diathermy in the treatment of angioma of the retina. This

FIG. 1.

The appearance of the fundus on December 9, 1943. The detachment, tear, and angioma can be seen.

together with the infrequency of the condition would appear to merit publication of experience in the treatment of the following case.

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Sgt. B. appeared for examination on December 9, 1943, with the complaint that suddenly the vision of the left eye had become defective two weeks previously. Prior to this his eyes had caused no trouble excepting the need to wear spectacles for short sight.

The visual acuities were as follows :—

Right eye with -5.50 D.sph. -1.25 D.cyl. $180^\circ = 6/9$.

Left eye with -6.50 D.sph. -0.50 D.cyl. $180^\circ = 6/36$.

FIG. 2.

The visual field prior to operation.

The right fundus was normal excepting some tortuosity of a smaller branch of the inferior temporal vein.

The left fundus showed the following features :—

(1) A large retinal detachment chiefly in the lower temporal quadrant.

(2) A circular tear of the retina in the 4 o'clock meridian about 12 mm. from the disc. Through it the choroid could be seen to be atrophic.

(3) The inferior temporal artery and vein were very broad and tortuous specially where they lay in the detached portion of the retina and appeared to end in a circular raspberry-coloured angioma about $1/3$ of the disc in diameter. In the detachment these two vessels had the same colouring.

Fig. 1 illustrates the fundal appearance. The vessels have been accurately reproduced but the fundal colouring is to some extent

FIG. 3.

Enlargement of the field, especially nasally can be seen.

schematic. Fig. 2 shows the extent of contraction of the visual field of the left eye.

General medical examination was carried out by Major R. Mowbray, R.A.M.C., Medical Specialist. There was no clinical evidence in the central nervous system and elsewhere of any vascular or other abnormality. The family history was negative so far as it concerned disease of the eyes, nervous and vascular systems.

After the usual preliminary measurements for the localisation of the tear and the angioma had been done, operation under local anaesthesia was performed on December 30, 1943, as follows:—

- (1) The localising measurements were confirmed by the production of electrolysis bubbles on the retinal surface at both the tumour and the tear.

FIG. 4.

The appearance of the fundus on March 22, 1944. The draining vein could not be definitely traced.

- (2) Surface diathermy was applied over the site of the tumour. The 2 mm. ball was used for 14 seconds at two places.
- (3) In similar fashion surface diathermy was applied over the site of the tear.
- (4) Micropuncture was done into the tumour.
- (5) Three micro-punctures were made in a vertical line up and in from the tumour with the intention of catching the feeding artery.

(6) Three micro-punctures were made in the region of the tear. From these about 15 minims of subretinal fluid were withdrawn by means of a sucker.

The Ophtharm diathermy apparatus was used.

The post operative progress of the case was uneventful. Both eyes were bandaged for 14 days. The patient was discharged to his Unit on February 21, 1944.

The condition when last seen on March 22, 1944, was as follows:—

Visual acuity of the left eye with -6.00 D.sph. -0.50 D.cyl. $180^\circ=6/9$ and Jaeger 1. Fig. 3 indicates the enlarged visual field. The fundal appearance is indicated in Fig. 4. The retina is in position. It can now be noted that the inferior temporal artery and vein cross each other although they did not appear to do so before the replacement of the retina. This effect was produced by the crossing taking place just where the vessels came forward to the detachment. The result of this observation was that the target during the operation was the draining vein instead of the feeding artery. It does not appear to have affected the result, however. The tumour appears to be occluded. The feeding artery is now of normal size and despite repeated searches the draining vein cannot be definitely traced.

Summary

(1) A description is given of a case of angioma retinae in which a tear as well as tumour was present.

(2) In this case the use of diathermy was efficacious.

I wish to acknowledge my indebtedness for permission to publish to Colonel J. Morrison, Officer Commanding, British General Hospital, and to Brigadier G. I. Scott, Consultant Ophthalmologist, Middle East Forces, who examined the case before operation and with whom the procedure was discussed.

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