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COMMUNICATIONS

CASE OF A GIANT HOLE OF RETINA

Numerous complications

Successful visual result after four years

BY

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THE following notes describe a typical case of a huge pseudo-disinsertion tear occurring in a very highly myopic eye. Several of these cases were described by Professor Weve in a very fine paper published in the Archives of Ophthalmology in August, 1936.

Mr. E. D. H., aged 33 years, a clerk by occupation, was sent to the Western Ophthalmic Hospital in May, 1934. He had lost the sight of his right eye some years previously and there was no perception of light present. A few weeks ago, he lost the sight in his *left* eye, and had no useful vision left. The case was seen by several members of the staff and the general opinion was against operative interference, but as it was the only eye, the patient begged me to operate.

On examination there was found a complete detachment of the retina: extending from "12.30 to 6.30 o'clock" was a marked fold of the retina rolled inwardly from the margin of the tear.

The horizontal width of the tear was 8-10 disc diameters; the base of the tear shewed details with a -16.0 D.Sph. lens. The retina was seen in detail at the upper and outer quadrant

FIG. 1.

FIG. 2.

with a +10.0 D.Sph., in the horizontal meridian with a +6.0 D.Sph. and below at " 5 o'clock " with a +2.0 D.

Operations. As the tear was so large and the retina rolled back, it was decided to do the operation in two stages with the hope of the retina flattening and the tear diminishing in area.

On May 5, 1934, after the usual preparation, a puncture with a 3 mm. Weve needle was made 15 mm. from the ora and in the " 12.30 " meridian. There was a copious flow of subretinal fluid.

FIG. 3.

Another puncture was made in the " 1.30 " meridian and no fluid escaped. On the first dressing, May 14, 1934, the eye shewed very little reaction but the tension was very soft.

May 15. On examination the detachment was much flatter and the horizontal diameter had diminished by two disc diameters; the patient stated that the field had improved.

On May 28, 1934, the major operation was performed. The surface of sclera was exposed from the superior rectus to the inferior rectus. The external rectus muscle was divided; marks were made on the ora at " 12.30, 2, 9, 4 and 5 o'clock." The distance marked at " 2 and 4 o'clock " was 18 mm., at " 3

o'clock " the distance was 24 mm. The insertions of the superior, inferior oblique, and inferior recti tendons, were partially resected. A barrage of punctures was made from " 12.30 to 6.30 " with a 1.5 mm. Safar needle passing through the above 18 mm. and 24 mm. marks. Above and below, at the upper and lower limits of the tear, a group of perforating diathermy punctures was made. At the end of the operation the diathermy coagulations were distinctly

FIG. 4.

seen in place. The external rectus was sutured and the wound in the conjunctiva closed.

After the operation the patient vomited off and on for 48 hours, and in spite of numerous drugs being tried it did not stop.

On June 2, 1934, the oedema of the conjunctiva was less, the reflex was clear, the cornea clear and the pupil well dilated. About a week after the second operation, the patient had severe vitreous haemorrhage. On June 20, 1934, there was *no* noticeable improvement and the patient left the hospital.

On May 4, 1935, the patient who in the meantime had learnt Braille and special Braille-shorthand and typing at St. Dunstan's, reported at the hospital. On examination the "tear" seemed less, and there was a difference of opinion as to whether it was closed.

The patient, who had always been optimistic, said "the sight was more useful than before."

On September 7, 1937, the patient was found to have a complete cataract. The projection and perception of light were good. Operation for the removal of the lens was suggested.

September 20, 1937, extraction of the lens. The operation was uneventful, and a week after the extraction fundus details could be seen. And the hole was seen to be healed. A report was received from the patient's doctor that with a high hypermetropic lens, the patient had seen 6/36.

May, 1938. As the sight had again diminished, it was decided to do a needling. The patient returned to his home, and reported again.

September 27, 1938. At this examination with a +8.0 D.Sph. the patient saw 6/24, could tell the time of a plain marked wrist watch, and read J.12. c. +11.0 D.Sph.

Summary

- May, 1934. 1. Puncture operation to allow retina to flatten.
2. Operation for closure of tear.

September, 1937. Extraction of lens.

May, 1938. Needling of the capsule.

September 9, 1938. Visual result. 6/24 = J.12.

THE AETIOLOGY OF TRACHOMA

BY

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THE parasitic cause of trachoma (*Chlamydozoon trachomatis*) was discovered in the year 1907 in the two widely separate regions of Java and East Prussia (Halberstaedter and Prowazek; v. Greeff, Frosch and Clausen). It was soon confirmed from Austria and since then has been found in all parts of the world.

The parasite passes through two stages, one free or extracellular in the secretion of trachomatous eyelids and the second intracellular in the epithelium of the conjunctiva. The free stage, or free initial body of Lindner, is a polymorph organism (Fig. 1). Bipolar bacilli, small diplococci and single micrococci have been described. The bipolar bacillus is the only form which can be recognized with certainty if there is secondary bacterial infection,