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NOTES ON AN EYELASH CARRIED BY A PERFORATING INJURY INTO THE POSTERIOR AQUEOUS CHAMBER AND REMOVED ELEVEN WEEKS LATER

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IN 1839, Ruete¹² described the interesting case of a tinker who had been struck in the left eye by a fragment of hot tin in 1834. In 1836, the eye was blind. The cornea, otherwise completely healthy, showed a fine and scarcely visible scar. The anterior chamber and aqueous humour were normal. The iris was of normal texture; but was adherent to the anterior lens capsule in almost the whole of the pupillary circumference. Iris pigment was noted in the pupillary area. Passing behind the pupillary edge four eyelashes of unequal length could be seen. A fifth lash lay in the posterior aqueous chamber, except for its tip, which protruded from a small perforation in the iris to the left of the pupil. The appearances remained unchanged on several successive examinations.

In 1868, Manz⁹ reported a case in which a cilium entered the posterior aqueous chamber of the eye through a perforating

wound at the limbus, passing behind the iris. Some months later the eye had quietened; but vision had been reduced to the counting of fingers. The eyelash, which was surrounded by a dark mass, could be seen passing behind the iris. The patient refused treatment.

Wagenmann¹⁴ in an excellent review gives sixty-three references to the subject of intra-ocular eyelashes; but cites no other cases of a cilium in the posterior aqueous chamber.

The following case would therefore appear sufficiently unusual to warrant a report:—

On June 4, 1935, the patient, a Bermondsey barge builder, aged 51 years, was hit in the left eye by a piece of a rivet. When admitted on the same day to the Royal Eye Hospital, the cornea showed a perforating wound about 4 mm. in length, extending from near the limbus above and nasally down and outwards towards the corneal centre. The anterior chamber was full of blood and the eye was soft. No intra-ocular details were visible. Repeated radiographs showed no evidence of an intra-ocular foreign body. The eye was treated by rest and atropine.

By June 29, 1935, the hyphaema had completely cleared, and vision was 6/24 partly. The edges of the corneal wound had united. The pupil was irregular as iris was attached to the whole posterior length of the wound. The eye remained irritable with ciliary injection but no keratic precipitates.

On July 29, 1935, a limbal keratome incision was made opposite the original wound, and an attempt was made to divide the anterior synechia with de Wecker's scissors. The cut iris bled freely, but the consequent hyphaema cleared in a few days. Slit-lamp examination then showed that the synechia had been completely divided, with the apparent exception of a fine strand which passed from the corneal scar backwards, to turn round the cut edge of the iris and be lost to view. It was assumed that this was a residual band of iris tissue.

The eye became very much less irritable, but as slight ciliary injection persisted, it was decided to divide the strand. An attempt was made to do this with a Ziegler's knife on August 10, 1935. The strand was insufficiently taut to be cut cleanly, but before division was pulled upon by the advancing knife blade. Surprise was considerable when the tip of an eyelash appeared in the anterior chamber, drawn down from behind the iris by the strand, much as a whip-handle might be pulled along by the whip-lash. The illustration shows the eyelash after being pulled downwards, now protruding into the anterior chamber from behind the iris.

It was decided to remove the eyelash. This was easily done with curved iris forceps through a small keratome incision on

August 21, 1935. The eye rapidly whitened, and when recently seen, vision was 6/9 without a correcting glass. The right eye sees 6/5 and has never been in any way affected.

Microscopical examination showed numerous pigmented cells, presumably from the posterior epithelium of the iris adherent to

The eyelash in the anterior chamber after being drawn down from behind the iris.

The microscopic appearance of the eyelash after its removal.

the shaft of the cilium. The cuticle of the hair was roughened. There was no root attached to the lash.

Remarks:—The few recorded cases are insufficient to permit of generalisation on the behaviour of eyelashes in the posterior aqueous chamber. In the anterior chamber they are frequently well tolerated, unless septic. Wagenmann¹⁴ cites a case of a cilium tolerated for as long as 34 years after its implantation. In some cases the cilia have caused irritation and have been removed^{4, 5, 11}. In rare instances intra-ocular cilia have caused

granulation tissue with giant cells¹⁶, an epidermal tumour¹¹, serous cysts of the iris², pearl cysts of the iris¹⁶, and in two cases^{6,7} sympathetic ophthalmitis. The second case⁷ was rather doubtful. A subconjunctival granuloma has recently been reported¹³ from an embedded cilium.

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A CASE OF "EXOPHTHALMIC OPHTHALMOPLEGIA WITH THYROTOXICOSIS"

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At the International Congress of Neurology, 1935, Russell Brain reported 22 cases of ophthalmoplegia occurring in patients suffering from exophthalmos with signs of thyrotoxicosis. He suggested that the clinical features of these cases constituted a distinct syndrome.

This disorder may develop spontaneously or occur after partial thyroidectomy for hyperthyroidism. Its onset may be acute or insidious and it appears to affect females to males in the proportion of 7 to 4 (exophthalmic goitre 10 to 1). Russell Brain states that it occurs in middle life, 18 of his 22 patients being over 40 and 9 over 50 years of age. The case described below which came under my care at the Moorfields Eye Hospital was a male aged 31 years.