MULTIPLE INTRA-OCULAR FOREIGN BODIES

were considerably smaller than the ordinary colloid body (Henle-Hassel body), and have on several occasions been seen as a transient manifestation in inflamed eyes).

On July 6, 1940, by means of the Haab magnet the foreign body was freed from the iris and it was removed through a keratome section. The patient was discharged from Hospital on July 13, 1940, with the eye in a quiet condition.

On July 20, 1940, some fine deposit was visible on the back of the cornea with the microscope. The posterior corneal reflecting zone showed good endothelial pattern with a few of the dark spots already mentioned. There was no pigment or deposit on the anterior surface of the lens. After retinoscopy R.V. with +0.5 D.Sph. +0.5 D.Cyl., axis 90°=6/6. L.V. with +1.25 D.Cyl., axis 30°=6/9.

On August 10, 1940, the left eye was completely white. There was a slight depression noticeable on the iris, with a pigmented floor and slight diffusion of rusty brown colour in the immediate neighbourhood only.

The weight of the fragment of metal was found to be 0.0025 gm.

It seemed to the writer worth reporting this case, as an indication of the fact that very minute magnetic foreign bodies may be retained without setting up any appreciable amount of siderosis during a period of considerable length.

A CASE OF MULTIPLE INTRA-OCULAR FOREIGN BODIES

BY

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On November 25, a man, aged 40 years, was stamping out steel aeroplane parts on a hand press when he felt a sting in his right eye. His eye was bathed by the first aid nurse, but in the evening he found the vision blurred, and saw a black shadow across his right field.

He was admitted to Moorfields next day in the care of Mr. Maurice Whiting, when the condition of the right eye was:—white eye; a small perforating wound above centre of cornea; the anterior chamber and iris normal; a track of a foreign body through the lens; in the vitreous—"A," a fine glistening foreign body about 3 mm. long, lying antero-posteriorly, with one end in the centre of the disc; "B," a smaller similar foreign body at "6 o'clock" at the bottom of the vitreous; two minute foreign bodies in the vitreous near the macula; small dusty vitreous opacities; the retina showed slight
edema around the disc; the tension was normal. Vision 6/36. The left eye was normal and read 6/5.

"A" was found to be weakly magnetic when the Haab magnet was used under direct ophthalmoscopic observation.

The magnet was used once or twice a day from November 26 till December 9, when "A" came forward clear of the disc; this was accompanied by a small haemorrhage temporal to the disc which cleared entirely in three days.

Two days later "B" came forward behind the iris at 7 "o'clock," and remained here until brought into the anterior chamber and removed by hand magnet through a keratome section on December 18.

Meanwhile the excursions of "A" became from day to day somewhat greater, but it was held by a strand in the vitreous, and returned always to the same position, where it was focused with a +12 lens in the ophthalmoscope.

After a respite of ten days the giant magnet was again used on December 28, and on the 29th "A" came into the anterior chamber. It returned through the pupil almost as soon as the magnet was switched off, but was removed through a keratome section by the hand and giant magnets.

The patient was discharged on January 3, 1943. The right eye was then white, the cornea showed two keratome incisions, one above and one on the temporal side, and a small scar above its centre from the perforating wound: There was no K.P., the anterior chamber was normal, the pupil under atropine, the lens clear without a trace of a track on ophthalmoscopic or slit-lamp examination. The vitreous showed some general haze and fine strands. A small darkened area in the centre of the optic disc marked the place where "A" had lain, and there was some pigment disturbance below at the site of "B." The minute foreign bodies seen on admission in front of the macula were not now seen. The tension was slightly below that of the left eye (which read 6/5 and was normal). Investigation on the Bjerrum screen showed a normal blind spot and no scotoma.

Right Vision was 6/18, improved to 6/12 by +0.50 D.Sph.

The points of interest in the case would appear to be the entrance of multiple weakly magnetic foreign bodies, the lodging of one in the optic disc, and the removal of the first after three weeks and the second after five weeks treatment and about 28 sessions with the Haab giant magnet, in spite of the disappointing result at first obtained.

These factors, especially the involvement of the optic disc, made the prospect of employing the posterior route particularly uninviting. So weakly magnetic were the particles that an attempt to remove them by scleral incision and hand magnet might easily have failed and trauma been inflicted to no purpose.
That the particle "A" could so easily be observed while under the giant magnet made the generally increasing response easy to assess; but the result was the same in the case of "B," which could not be observed and yet was successfully removed.

One must conclude that however poor the initial response, it is unwise to abandon the giant magnet for small magnetic intra-ocular foreign bodies until a very prolonged trial has been made. Ophthalmoscopic observation during application of the magnet is of great assistance, as the excursion obtained may increase gradually although the resting position may remain the same for a long period. Even if observation is impossible, persistence may succeed, though it is much more difficult to decide whether progress is being made.

It is not claimed that the final result in this case will be a first class eye, but it is suggested that less damage was inflicted than would have resulted from employment of the posterior route.

The patient has been seen two weeks after his discharge; the vision of the left eye had improved to 6/9 with correction.

I wish to thank Mr. Maurice Whiting, F.R.C.S., and Surgeon Rear Admiral H. Whiteside, R.N., for their permission to report this case.

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**ANNOTATION**

**Insidious Cases of Glaucoma**

If one thinks of the number of cataract extractions performed each year one must admit that the sequel of raised intra-ocular pressure is not very common. But it does occur sometimes and the sort of case we have in mind would be an admirable test for a candidate in an examination for a higher diploma in ophthalmology, one which, if properly investigated, would give ample opportunity for the examinee to prove his worth. For such cases are not simple cataracts or simple glaucomas; they partake of each and the signs, particularly those on the glaucomatous side, are apt to be anomalous. When one sees a patient with a highly congested eye and steamy cornea that can be seen from a distance it is usually a fairly simple matter. But with a quiet eye and clear cornea the presence of raised tension is not so obvious and the mind may easily get sidetracked into looking for other reasons for defective vision, such as lens capsule, macular change and what not. We call to mind a case of this sort which came to us from a remote part of the country.