SPONTANEOUS RUPTURE OF THE GLAUCOMATOUS EYE: AN ILLUSTRATIVE CASE

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IT must be rare for a glaucomatous eye to come under observation at the moment of rupture or immediately afterwards, and any record of the symptoms is therefore of value as tending towards a fuller knowledge of all phases of this condition. The only reference available to me is that of the case of spontaneous rupture of the cornea in secondary glaucoma due to dislocation of the lens, shewn by Mr. N. Bishop Harman¹ at a meeting of the Section of Ophthalmology of the Royal Society of Medicine on February 3, 1915:

"An injury caused total dislocation of one lens into the posterior chamber, where it was loose. The resulting glaucoma was absolute, and vision was lost. The cornea was anæsthetic, the iris quite retracted and immobile. The condition remained for two years without ulceration of cornea or splitting of Descemet's membrane. Three months later, however, without any further accident, the cornea was split horizontally, and the membranes were prolapsed. The cause of the rupture was a retro-choroidal hæmorrhage."

Some years ago I was called out hurriedly one Sunday evening to see a woman whom I found semi-maudlin from fright, and sitting up half naked on a dirty bed in a single apartment slum dwelling, which was crowded with interested spectators. A thin stream of blood was trickling down her cheek, coming from the right eye, from which vitreous and part of the iris were prolapsing through a central rupture in the cornea, the softened remains of which were of an opaque bluish-white colour. No sign of the lens was noticed. By the side of the bed there was a large zinc pail holding, perhaps, half a gallon or more of clear watery fluid, which, it was claimed, she had vomited.

The room was at once cleared, and she was given $\frac{1}{4}$ grain of morphin by the mouth. As this was vomited, it was repeated in an hour (when it was found to soothe the pain and check the vomiting), but, in the meantime, she was made to lie down in bed and was warmly wrapped up in borrowed blankets, a hot bottle being put to her feet. No attempt was made to cleanse the part, but a pad was applied over the closed lids and held in place with a bandage.

The story obtained was somewhat as follows. She was a travelling pauper, and was in the habit of going about from place

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to place wheeling in a chair her husband, a cripple, who gained his living by playing a fiddle in the streets. Five years before, her right eye was injured with a splinter of glass from a broken bottle; it subsequently became blind, as the result, no doubt, of chronic glaucoma, and she began to be subject to severe, but intermittent, headaches, worse especially in the right supraorbital region, which had, however, by no means a monopoly of the pain. For these headaches nothing was done, and, in spite of them, she continued her peregrinations of the country-side.

The day before her eyeball burst, the headache became especially severe. It continued overnight, and next day she felt too ill to get up from bed or take any food. At about 6 p.m., the headache never having left her meanwhile, the cornea suddenly gave way, to her great alarm, the eye discharging first a little jet of watery fluid (which must obviously have been the aqueous under tension) and then a steady trickle of blood. At the instant of rupture (which was spontaneous, and not caused by vomiting² or coughing, etc.), there was a great accession of pain over the forehead, and she at once began to vomit without effort, and in sudden gushes copious quantities of clear watery material, which was not bile-stained or mixed with food, as she had been fasting all day. Curiously enough, she presented no evidence of shock when seen very shortly afterwards, although the vomiting was continuing to a certain extent, and was still not merely sudden but actually violently expulsive whenever it occurred.

Arrangements were at once made to have her admitted to the nearest hospital, to have the ruptured eye enucleated. She refused to go that night, but went without any difficulty the next morning. A few days afterwards I tried to communicate with the surgeon in charge. As he was not at home I rang up the hospital—which had no house surgeon—to inquire how the woman was, but was refused all information.

The amount of haemorrhage in this case was very slight, probably less than a fluid drachm altogether; it ceased entirely on the administration of the second dose of morphin, and did not recur. The profuse haemorrhage stated to occur in rupture of a glaucomatous eye,³ and such as is significant of any rupture of the globe,⁴ was only conspicuous by entire absence. Accompanying the pain of acute congestive glaucoma vomiting is a well-recognized event, and in connection with the disturbances of intraocular pressure produced by the operative procedures incidental to extraction of the lens it sometimes occurs, but is never, apparently, anything like so copious and free as it was in this case. The probability is that it was due to an acute gastric dilatation, a condition of some danger, the prompt recovery from which was a most fortunate event. It is of interest to remember that a very considerable proportion of the

recorded cases of this condition (acute dilatation) have followed either upon some injury or else an operative procedure.

REFERENCES

1. "Reports of Societies," *Brit. Med. Jour.*, Feb. 13, 1915, p. 290.
2. "Among the older writers we find Ficker" (*Journal der praktischen Arzneykunde und Wundarzneykunde*, 1809, Vol. XI, p. 63), and the Ephimerides giving instances of exophthalmos from vomiting. Fabricius Hildanus *Opera omnia*, 1646, cent. I, obs. 1) mentions a similar instance. Gould and Pyle, *Curiosities and Anomalies of Medicine*, 1901, p. 527.
3. Priestley Smith in Norris and Oliver's *System of Diseases of the Eye*, Vol. III, 1897, p. 670.
4. Gruening, *l.c.*, p. 694. "Rupture of the Cornea is so exceeding rare, if it occur at all, that it may be left out of consideration." Beaumont, *Injuries of the Eyes*, 1907, p. 71.

OPHTHALMOLOGICAL SOCIETY CONGRESS, 1920

THE Eighth Annual Congress of the Ophthalmological Society of the United Kingdom was held on April 29, 30, and May 1, 1920, under the Chairmanship of the President, Mr. John B. Story, P.R.C.S. Ireland. The morning of the first day was devoted to papers, as is customary. The President gave a short address in which he strongly advocated that before a student's name is placed on the Medical Register as a qualified practitioner, evidence of at least three months' instruction in the eye department must be presented, and the candidate must undergo a practical examination, conducted by two or more ophthalmic surgeons. Mr. C. H. Usher described the eyes of some goldfish with enlarged corneae, and showed the specimens on which his paper was based; as an addendum to this paper, Mr. Treacher Collins dealt with cases of megalocornea and of microcornea. A paper by Dr. John Rowan, entitled, "Are not some cases of glaucoma better treated without operation, and, if so, what are the indications?" produced, as might be expected, a considerable amount of discussion. This is a thorny subject; while the younger school insisted on the value of the tonometer, Mr. Richardson Cross sturdily upheld the "tactus eruditus," the educated finger, and the state of the visual field, while Mr. Treacher Collins spoke of the age and general condition of the patient. Mr. Zorab read notes on his later results of aqueoplasty, and his cases illustrating this operation were on view at the clinical meeting later in the day. The last paper read was one by Mr. Harrison Butler on the subject of post-operative infection in cases of cataract. It was unfortunate that time did not allow of more than a very limited discussion of this practical subject.