Aniridia Intra-ocular Lens Implantation in a Geriatric Patient

The Editor,

Sir,

An 80-year old man was seen, due to visual loss bilaterally and a disquieting glare in his right-eye. In his medical history, he had a blunt trauma and underwent a primary penetrating surgery of his right-eye a year previously. In addition, the patient declared that he had chronic visual loss in his left-eye. Biomicroscopic examination of the right-eye revealed a relatively clear cornea, widely extended conjunctival scarring at superonasal and inferotemporal sides, vitreous prolapsus into the anterior chamber, aphakia with total absence of capsule and nearly 9 clock hours absent of the iris (Figure).

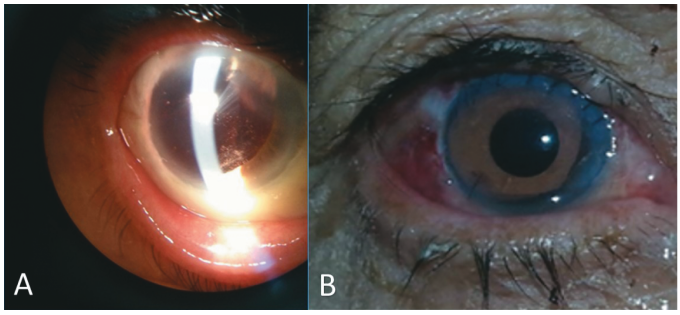

Figure: Pre-oprative image designates pre-operative vitreous prolapsus to the anterior chamber, aphakia with absent capsule and extensive iris defect (A). Image illustrates the postoperative appearance of the right-eye with cosmetic improvement (B).

There was a mature cataract in his left-eye as well. His visual acuities were 20/1250 (4/10 with an aphakia correction of +11.0) and light perception in the right and left eyes, respectively. Overall, phacoemulsification was planned for his left-eye. After an uneventful surgery his best-corrected visual aquity (BCVA) was 20/20 after a small refractive correction of -0.75 -1.0 × 110 in his left-eye. Since the subtotal absence of the iris and aphakia with no remnant of the capsule, an aniridia intraocular lens (IOL) with scleral fixation was carried out on his right-eye (Ophtec 311, brown). Following the conjunctival peritomy, scleral flaps at 2 and 8 O'clock are made to cover the knots of the double-arm 10/0 prolen sutures.

The needle of the non-absorbable 10/0 prolen suture was passed through the scleral flap to another one. Superior corneal incision was enlarged to let the implication of 9 mm wideness of the aniridia lens optic. Trans-scleral fixation of the IOL was performed to 1 mm posterior to the limbus. Thereafter, scleral flaps were closed using 10/0 nylon suture. Conjunctival was closed by using a 8/0 vicryl suture. Corneal incision was sutured continuously with 10/0 nylon suture. At the first day visit, examination revealed a BCVA 20/28 with the correction of 2.50 × 15 refractive error without any complication. The right-eye was quite cosmetic compared with the left eye's colour (Fig. 2). The fundus could be readily seen through the 4 mm diameter pupil size of IOL optic.

Prosthetic iris devices (PID) have been previously established as an effective method for the treatment of congenital or acquired aniridia (1, 2). Many types of PIDs have been produced with respect to the severity and extent of the iris defect. Prosthetic iris devices can be classified as endocapsular PIDs, combined lens-iris diaphragm (aniridia lens) and particular artificial iris (2). Since this patient had extensive aniridia and aphakia with absence of the capsule, a combined lens-iris diaphragm has been used. Although being effective, the aniridia lenses need a large corneal incision for its placement, due to its rigid and unfoldable material [polymethylmethacrylate] (1, 2).

Accordingly, we would like to highlight that combined lens-iris diaphragm keeping in mind the complications could be readily used for the treatment of combined aniridia and aphakia with absence of capsule.

Keywords: Aniridia lens, aphakia, trauma

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