Iris stromal cyst with cataract managed by cyst aspiration and diode laser photocoagulation in a child

Dear Editor,

A 7-year-old boy with no history of trauma or previous ocular surgery presented with redness, watering of the left eye since 1 day. The uncorrected visual acuity was 20/20 N6 and 20/60 N6 in the right and left eye, respectively. The right eye was normal. Slit-lamp examination (SLE) of the left eye revealed 2+ cells and flare in the anterior chamber (AC) and a translucent cyst originating from the mid-iris covering the pupil area [Fig. 1a]. The cyst was in contact with the corneal endothelium and the lens [Fig. 1b]. The portion of the lens seen was clear. The intraocular pressure (IOP) was 18 mm Hg in both eyes. Ultrasound biomicroscopy of the left eye revealed a cystic lesion arising from the iris stroma, measuring 4.63 mm in width and 2.98 mm in height [Fig. 2]. The posterior iris epithelium was intact. The patient was put on topical steroids. Once the inflammation subsided, aspiration with excision of the cyst with diode laser photocoagulation to the inner cyst wall was performed.

The cyst was aspirated with a 26G needle. The anterior cyst wall was excised with intraocular micro-scissors and was found to be attached to the iris by a peduncle. The base of the peduncle was excised, resulting in an inferior peripheral iridectomy, after which an anterior capsular cataract at 5 o’clock position was noticed. Since the visual axis was clear, the lens was left untouched. The inner cyst wall, attached to the iris, was treated with diode laser with a power of 220 mW, 200 microns spot size and 200 ms duration.

Postoperatively the patient was put on antibiotic-steroid, timolol maleate 0.5%, and homatropine eye drops. Histopathology findings were consistent with the diagnosis of iris stromal cyst. At 1 week, the eye was quiet, with a lasered scar.
on the iris [Fig. 3a]. On the last follow-up, uncorrected visual acuity was 20/20p in the left eye. SLE showed a clear cornea, quiet AC, atrophic scar in the iris with posterior synechiae and an anterior capsular cataract at 5 0'clock position [Fig. 3b].

Congenital iris stromal cysts are usually diagnosed in early childhood[1] and may cause corneal edema, subluxation of the lens, iritis, raised IOP, cataract, band keratopathy, corneal touch and hyphema.[2] Our patient presented with iritis and was found to have a solitary, smooth, translucent cyst.

Iris stromal cysts have a more aggressive course in children as compared to adults.[2] Presence of decreased visual acuity, corneal and lens touch necessitated surgery in our patient.

Association of cataract with iris stromal cysts has been noted.[3] Classic treatment consists of extensive surgery like block excision of the lesions.[4] Haller et al. recommended conservative management with aspiration and endophotocoagulation in children, since preservation of ocular structures would facilitate amblyopia management.[5] We feel that cyst aspiration with excision of the collapsed cyst with diode laser photoocoagulation to the cyst wall adherent to the iris would be an ideal surgery in selected cases.

Vasudha Kemmanu, Naresh K Yadav1, Rachna V K, Sathi Devi M S
Departments of Pediatric Ophthalmology and Strabismus, 1Vitreo Retina Services, 2Glucoma Services, Narayana Nethralaya, Super Specialty Eye Hospital and Postgraduate Institute of Ophthalmology, Bangalore, India

Correspondence to: Dr. Kemmanu Vasudha, Department of Pediatric Ophthalmology and Strabismus, Narayana Nethralaya, Super Specialty Eye Hospital and Postgraduate Institute of Ophthalmology, 121/C, Chord Road, Rajajinagar, 1st ‘R’ Block, Bangalore – 560 010. India. E-mail: vasudhanaresh@yahoo.co.in

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