Free Iris Cyst in the Anterior Chamber

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Abstract. A 50-year-old man had a free iris cyst in the anterior chamber that was treated by puncturing using an Nd:YAG laser. Following laser treatment, the cyst wall settled in the anterior chamber angle and no complications were encountered during 4 months of follow-up. [Ophthamlc Surg Lasers Imaging 2004; 35:74-75.]

INTRODUCTION
Iris cysts may be classified as primary, which are of congenital origin, and secondary, resulting from intraocular implantation of surface epithelium by surgery or penetrating trauma. The primary cysts may originate either from pigment epithelium or the stroma. Iris pigment epithelial cysts are seen mostly in adults due to the impairment of fusion of the posterior epithelial layer of the iris, whereas stromal iris cysts are usually congenital and encountered during childhood.

CASE REPORT
A 50-year-old man complained of a shadow coming in front of his left eye in near gaze, impairing his vision. He had no history of previous trauma or surgery. He had a bilateral, uncorrected visual acuity of 1.0. Biomicroscopic examination revealed a pigmented iris cyst in the left eye that moved freely in the anterior chamber with head movement (Figs. 1 and 2). The intraocular pressure of each eye was 14 mm Hg. The funduscopic examination revealed normal findings.

Because the cyst was symptomatic, its wall was punctured by a 7-mJ shot of Nd:YAG laser using a 104 D Wise iridotomy-sphinterotomy lens (Ocular Instruments, Inc., Bellevue, WA). The collapsed cyst settled in the inferior half of the angle (Fig. 3). The intraocular pressure did not increase after laser treatment. Topical fluorometholone (0.1%) was administered 4 times a day for 1 week. No increase in intraocular pressure, inflammation, or reformation of the cyst was noted. No visual or opthalmoscopic problems were encountered during 4 months of follow-up.
DISCUSSION

Some rare cases have been reported in which iris pigment epithelial cysts that originated from iris pigment epithelium may break off and float freely in the aqueous humor or the vitreous. A cyst generated from the iris pigment epithelium may pass the pupilla and come to the anterior chamber. Those cysts are generally located inferiorly in the angle. The cysts may touch the corneal endothelium when they move freely in this location. In our case, the cyst coming in front of the pupil due to head movement at near gaze and gravity had impaired vision. The mobilization of the cyst was also observed with alteration of the head position. Iris pigment epithelial cysts usually do not result in any complication because they are small, stationary, and may regress spontaneously; so periodic follow-up is performed. The cyst should be treated if the visual axis is obscured or it touches the endothelium as noted in our case.

Mitomycin injection into the cyst, needle aspiration, and endodiathermy and surgical excision were proposed by Kawaguchi et al., Tsai et al., and Verma et al., respectively. However, recurrences derived from the epithelium have been reported after photocoagulation. Kuchenbecker et al., Köklü et al., and Oner et al. did not report any recurrence. We also did not note such a recurrence. YAG laser has been proposed as an effective means of treatment because it is easy to perform, safe, and repeatable.

REFERENCES