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VIDEO REPORT

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Pigmented free-floating iris cysts

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ABSTRACT

Free-floating iris cysts are rare. These cysts may be located in the vitreous or the anterior chamber. Anterior chamber cysts can be idiopathic or induced by trauma or surgery. Vitreous cysts may be associated with the remnants of the hyaloid system and therefore be congenital, or can result from trauma or ocular disease.

Case 1: An 8-year-old girl presented for routine follow-up with a past history of undergoing traumatic cataract extraction with intraocular lens implantation OD one year prior. Slit lamp examination showed a free floating dark brown, pigmented round iris cyst in the anterior chamber OD.

Case 2: A 9-year-old boy presented for routine eye examination. Examination of the anterior vitreous showed a large pigmented cystic lesion. It was free floating and appeared to be composed of pigmented cells joined together by a semi-translucent membrane, probably composed of pigmentary epithelium.

Discussion: Free-floating iris cysts in the anterior chamber are rare, and can be congenital or associated with trauma, surgery, medications or tumors. The wall usually comprises iris pigment epithelium containing pigment granules. The cysts can get detached from the iris surface and float freely in the anterior chamber, or can get reattached to the iris at some other location. They can remain stable or can grow and cause visual disturbance or secondary glaucoma. Visually symptomatic cysts or cysts causing glaucoma need to be removed surgically or collapsed using NdYAG laser.

The origin of vitreous cysts has been the source of controversy. It has been proposed that they may be associated with the remnants of the hyaloid system and therefore are congenital, or they can result from trauma, retinal surgery or other ocular disease. Bilateral cases have been reported in patients with retinitis pigmentosa. Rarely, vitreous cysts can lead to visual disturbances if they are imposed on the visual axis. Orellana and colleagues removed a vitreous cyst via a pars plana approach, aspirating it with a 20-gauge needle. Awan suggested disrupting the cyst with argon laser photocystotomy as a simpler and safer method.

In our series the patient with the anterior chamber cyst was followed up for a period of two years and the patient with vitreous cyst was followed up for a period of three years without any increase in the size of the cysts or the occurrence of complications.

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