Idiopathic Giant Retinal Cyst

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ABSTRACT: The authors describe a case report of idiopathic asymptomatic giant retinal cyst with underlying hyperpigmentation. Low- and high-frequency ultrasound (ultrasound biomicroscopy) revealed an anechoic giant cyst with two hyper-reflective traction bands between the ciliary body and the anterior base of the retinal cyst. There was no retinal detachment.


INTRODUCTION

Retinal cysts are most commonly seen in cases of long-standing retinal detachment. A retinal cyst without retinal detachment was noted in a case of Coats' disease. We describe an idiopathic asymptomatic giant retinal cyst.

CASE REPORT

A 44-year-old man, asymptomatic and with no history of ophthalmic disease, was referred for a pigmented retinal tumor with an overlying retinal detachment (RD). Examination revealed 20/16 vision and IOP of 16 mm Hg. Slit lamp biomicroscopy and gonioscopy were unremarkable.

Dilated indirect ophthalmoscopy of the right eye revealed a fixed peripheral cystic lesion in the inferotemporal quadrant with an underlying retinal hyperpigmentation without inflammation (Figure 1, page 252). There was no vascular sheathing, exudative reaction, or vitreous cells. The left eye was healthy.

B-scan ultrasonography (12 and 35 MHz) was performed. Low-frequency examination showed a retinal cyst measuring 8.2 mm in length × 8.4 mm in width × 7.9 mm in height. Its internal volume was anechoic (Figure 2, page 252). High-frequency ultrasound (ultrasound biomicroscopy) revealed two hyper-reflective traction bands between the ciliary body and the anterior base of the retinal cyst (Figure 3, page 252). The pigmented subretinal component was hyperechoic, with no evidence of choroidal or scleral invasion (Figure 4, page 252).

DISCUSSION

Cystic retinal degeneration is most commonly associated with long-standing RD. Characterized by splitting of the retina at the outer plexiform layer, it is believed to occur after retinal degeneration. However, all but one of the previously reported retinal macrocysts have been associated with rhegmatogenous RD. They were typically self-limited and surgically drainable. The principal differential diagnosis includes senile retinoschisis, which is usually bilateral, asymptomatic, and nonprogressive. However, retinoschisis is more commonly found in the peripheral inferotemporal quadrants, with a sharply circumscribed bullous appearance.

In this case, the patient had no history of RD or any known retinal disease. The only synchronous abnormality was the flat subjacent area of pigmentation, which might be related to past occult trauma.
This giant retinal cyst appears benign, but periodic dilated ophthalmoscopy was recommended. A literature search of giant retinal cyst and retinal macrocyst yielded no similar cases. Thus, we describe a unique idiopathic giant retinal cyst.

REFERENCES


