

# Pigmented iris cyst in vitreous chamber

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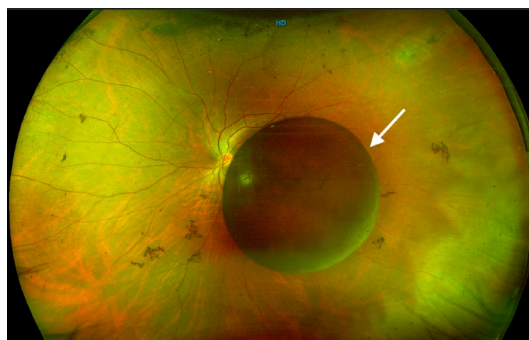
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## DESCRIPTION

A 45-year-old male patient, diagnosed elsewhere as retinal detachment, was seen in the retina services of our institute. There was no history of prior ocular trauma or surgery. His vision was 20/20 in his right eye and 20/125 in the left eye. There were no signs of any ocular inflammation and the intra-ocular pressure was within normal limit. A retinal evaluation revealed a free-floating pigmented cyst in vitreous cavity (figure 1, white arrow). A pars plana vitrectomy was done and the cyst was removed. The histopathology was suggestive of iris pigment cells. The pigmented cells on the cyst wall are more likely to originate from the ciliary pigment epithelium. The cysts initially are formed on the ciliary body and then get dislodged into the vitreous, giving rise to the abrupt symptom of a diminution of vision.

Vitreous cysts are rare ocular malformations, which can be both pigmented and non-pigmented cysts.<sup>1</sup> Non-pigmented congenital cysts are believed to be remnants of the hyaloid vascular system such as Bergmeister's papilla and Mittendorf's dot,<sup>2</sup> while pigmented congenital cyst has been reported to be choristomas of the hyaloid vascular system.<sup>3,4</sup> Acquired cysts have been reported to occur after ocular trauma or as a complication of ocular inflammation and uveitis.<sup>4</sup> They have also been associated with uveal colobomas, retinitis pigmentosa and retinal detachment surgeries.<sup>5–7</sup> Shields had postulated that epithelial cysts arise between the pigmented epithelial layers of the iris and often break free and migrate into the vitreous chamber and these are called dislodged cysts. These dislodged cysts can come in visual axis and cause a sudden diminution of vision.<sup>8</sup>



**Figure 1** Pigmented iris cyst in vitreous chamber.

## Patient's perspective

I had a black shadow moving in my eye, and after the surgery, my vision is more clear and the shadow has gone.

## Learning points

- ▶ Congenital vitreous cysts may be remnants of the hyaloid vascular system such as Bergmeister's papilla and Mittendorf's dot or may represent choristoma of the hyaloid vascular system.
- ▶ Acquired cysts may be associated with trauma, uveitis, uveal colobomas and retinal detachment surgeries.
- ▶ Pigmented epithelial may also arise between the pigmented epithelial layers of the iris and can often break free and migrate into the vitreous chamber.

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