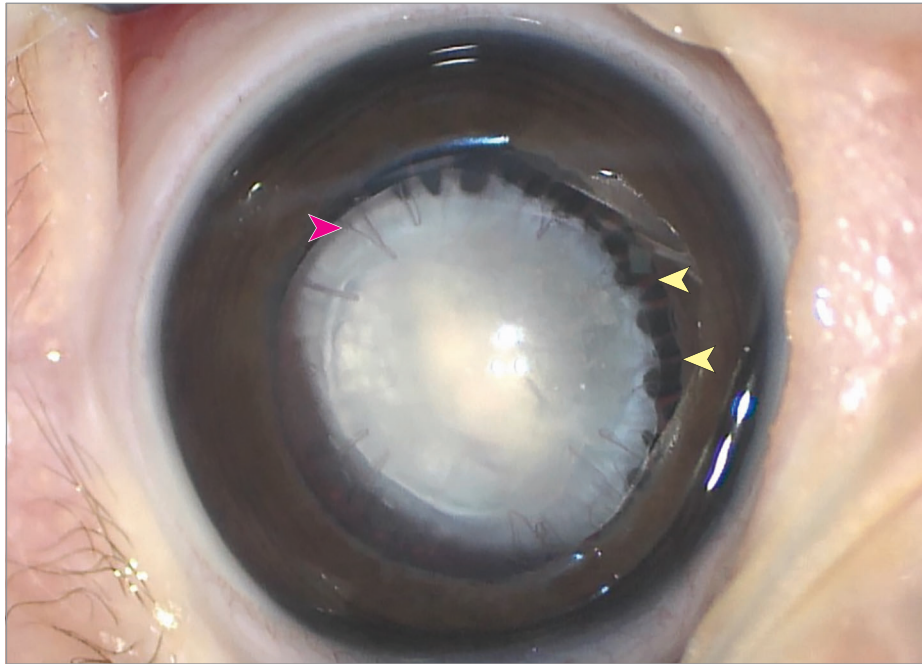


## Ophthalmic Images

## Leukocoria Due to Persistent Hyperplastic Primary Vitreous

Shaohua Liu, BS; Linlin Hao, MD; Xuejiao Qin, MD



**Figure.** Typical manifestation of leukocoria due to persistent hyperplastic primary vitreous complicated with cataract. This preoperative photograph is taken of the left eye of a 50-day-old boy. The boundary of the lens appeared similar to contours of a pie crust, with ectopic vasculature (pink arrowhead) and elongated ciliary processes (yellow arrowheads) attached around.

**A 50-day-old boy** was referred to the physician due to a white pupil in the left eye (**Figure**). Preoperative ocular B-ultrasonography showed a thickened lens with no obvious persistent primary hyaloid in the vitreous. There was no distinct capsule, and a lensectomy was performed followed by anterior vitrectomy. A semi-transparent band was detected at the back of the lens and cut off during the operation. No other ocular or systemic abnormality was

detected. Leukocoria is a sign of congenital cataract, retinoblastoma, endophthalmitis, or persistent hyperplastic primary vitreous (PHPV).<sup>1</sup> PHPV, also known as persistent fetal vasculature, is a failure of embryonic regression of the original vitreous and hyaloid vasculature.<sup>2</sup> PHPV has diverse manifestations ranging from a trivial remnant of hyaloid vessels to a dense fibrovascular mass in the vitreous body; the lens may be wrinkled into a mass when complicated with cataract. An intraocular lens is planned to be implanted when the patient is 2 years old.



CME at [jamacmelookup.com](https://jamacmelookup.com)

## ARTICLE INFORMATION

**Author Affiliations:** Eye Centre of Shandong University, the Second Hospital of Shandong University, Shandong, China.

**Corresponding Author:** Xue-jiao Qin, MD, Eye Centre of Shandong University, The Second Hospital of Shandong University, No. 115 Wenhua Xi Road, Jinan, Shandong 250012, China ([qinxuejiao@hotmail.com](mailto:qinxuejiao@hotmail.com)).

**Conflict of Interest Disclosures:** None reported.

**Additional Contributions:** We thank the patient's father for granting permission to publish this information.

## REFERENCES

1. Shastry BS. Persistent hyperplastic primary vitreous: congenital malformation of the eye. *Clin*

*Exp Ophthalmol.* 2009;37(9):884-890. doi:[10.1111/j.1442-9071.2009.02150.x](https://doi.org/10.1111/j.1442-9071.2009.02150.x)

2. Reese AB. Persistent hyperplastic primary vitreous. *Am J Ophthalmol.* 1955;40(3):317-331. doi:[10.1016/0002-9394\(55\)91866-3](https://doi.org/10.1016/0002-9394(55)91866-3)