

Clinical Image

Persistent Hyperplastic Primary Vitreous

Marrakchi Salma*; El Aouadi Salma; Allali Nazik; Chat Latifa; El Haddad Sihame

Department of Pediatric Radiology, Ibn Sina University Hospital, Rabat, Morocco

*Corresponding author: Marrakchi Salma

Department of Pediatric Radiology, Ibn Sina University Hospital, Mohamed Ben Abdellahreguai, Al Irfane, Rabat, Morocco.

Tel: +212650095952

Email: marrakchi.salma@gmail.com

Received: September 16, 2024

Accepted: September 27, 2024

Published: October 04, 2024

Clinical Image

Persistent Hyperplastic Primary Vitreous (PHPV) is a congenital developmental anomaly caused by the incomplete regression of primary vitreous with the abnormal persistence of hyaloid vasculature [1]. Clinically PHPV presents with leucocoria, microphthalmia, and cataract [2]. Diagnosis can be made on imaging. Ultrasound reveals a hyperechoic structure in the vitreous chamber extending from the posterior wall of the lens to the optic disc and vascularized on color Doppler [3]. CT scan can better demonstrate all the findings of ultrasonography and aid in better visualization of the underlying pathologies [4]. On magnetic resonance imaging, PHPV appears as a triangular retrolental vascular soft tissue mass with a central stalk of hyaloid remnant connected to the optic disc [5]. The image below depicts a 3-year-old patient who presents with leucocoria. Axial CISS-T2-weighted 1.5T MR image revealed bilateral abnormal structure extending from the retrolental area to the region of the optic disc, appearing as low T2 signal against the normal T2 signal of the globe.



Figure 1:

References

1. Kadom N, Sze RW. Radiological reasoning: leukocoria in a child. *American Journal of Roentgenology*. 2008; 191: S40-S44.
2. Galhotra R, Gupta K, Kaur S, Singh P. Bilateral Persistent Hyperplastic Primary Vitreous: A Rare Entity. *Oman J Ophthalmol*. 2012; 5: 58–60.
3. Pieroni G, Russo M, Bolli V, Abbasciano V, Fabrizzi G. Ocular ultrasonography in pediatrics: Persistence of hyperplastic primary vitreous. *Radio Med*. 2001; 101: 270–4.
4. Kassi K, Raboua M, Zouita I, Basraou D, Jalal IH. Persistent Hyperplastic Primary Vitreous: A Case Report and Literature Review. *Sch J Med Case Rep*. 2023; 11: 371–374.
5. Lameen H, Andronikou S, Ackermann C, Cilliers G, Schulze OC, Erlank A, et al. Persistent hyperplastic primary vitreous versus retinal detachment. *SA J Radiol*. 2006; 24: 24–5.