International Journal of Clinical Science and Medical Research
ISSN(print): 2770-5803, ISSN(online): 2770-582X
Volume 05 Issue 04 April 2025
DOI: https://doi.org/10.55677/IJCSMR/V5I4-01/2025, Impact Factor: 8.005
Page No : 86-87

Congenital Vitreous cyst, A Rare Diagnosis to be Aware of : A Case Report

Sara Ennaki*[1], Kawtar El Hadi[2], Ali Rami[3], Zyad Laftimi[4], Ghizlane Daghouj[5], Loubna El Maaloum[6], Bouchra Allali[7], Asmaa ElKettani[8]
[1-8]Department of Pediatric Ophthalmology, CHU Ibn Rochd-Hassan II University, Casablanca.

ABSTRACT

Vitreous cysts in children are rare. We report the case of a 5-year-old child who presented to the consultation department with the sensation of a floating body in the left eye, the position of which changed with eye movements, without any drop in visual acuity or notion of associated ocular trauma. On slit-lamp examination, the left eye showed a solitary pigmented cyst floating in the vitreous. After ruling out other possible etiologies, the diagnosis of congenital vitreous cyst was made. Treatment abstention was indicated for our patient.

Published Online : April 09, 2025

KEYWORDS:
Vitreous cyst, Amblyopia, Pediatrics, Congenital, floater

INTRODUCTION

Vitreous cysts are rare. First described in 1899 by Tansley(1). Found by chance, they are usually isolated, asymptomatic and show very little progression. They may be congenital or acquired. Treatment is often withheld, except when cysts become symptomatic.

CASE DESCRIPTION

We report the case of a 5-year-old child who has had myodesopsia in her left eye for a month. She had no prior history indicating trauma, nor any signs of inflammatory or infectious ocular conditions. Clinical examination revealed corrected visual acuity of 10/10 in the right eye and 8/10 in the left, with a calm anterior segment bilaterally. On the fundus examination, the left eye showed a pigmented, oval, translucent formation floating in the anterior vitreous, mobile with movement of the eyeball, with no attachments to the retina. (Fig.1)

Fundus examination of the right eye was normal.

Ocular ultrasound revealed a poorly limited oval formation measuring 1.9/4.5mm in the left eye, with no calcifications(Fig.2). Ultra-biomicroscopy did not reveal the presence of ciliary cysts. Infectious serologies (cysticercosis/ echinococcosis/ toxoplasmosis) were negative.

Given the patient's good visual acuity, periodic fundus monitoring was recommended. No change in size or aspect of the cyst was noted. Treatment for amblyopia was started. After 1 year, her corrected visual acuity is 10/10 bilaterally.

Corresponding Author: Sara Ennaki

Cite this Article: Sara Ennaki, Kawtar El Hadi, Ali Rami, Zyad Laftimi, Ghizlane Daghouj, Loubna El Maaloum, Bouchra Allali, Asmaa ElKettani (2025). Congenital Vitreous cyst, A Rare Diagnosis to be Aware of : A Case Report. International Journal of Clinical Science and Medical Research, 5(4), 86-87

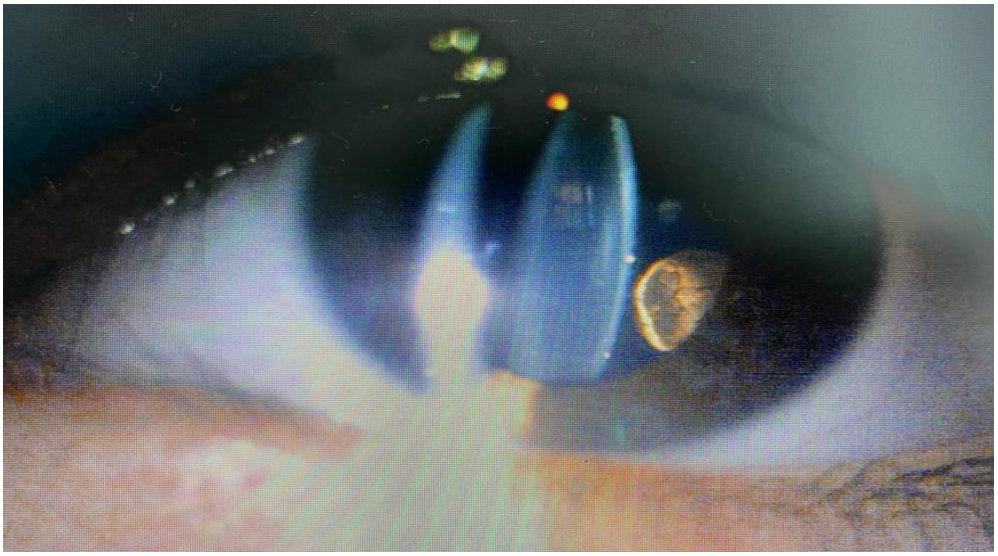

Figure 1: Slit lamp photograph of the left eye showing the pigmented vitreous cyst

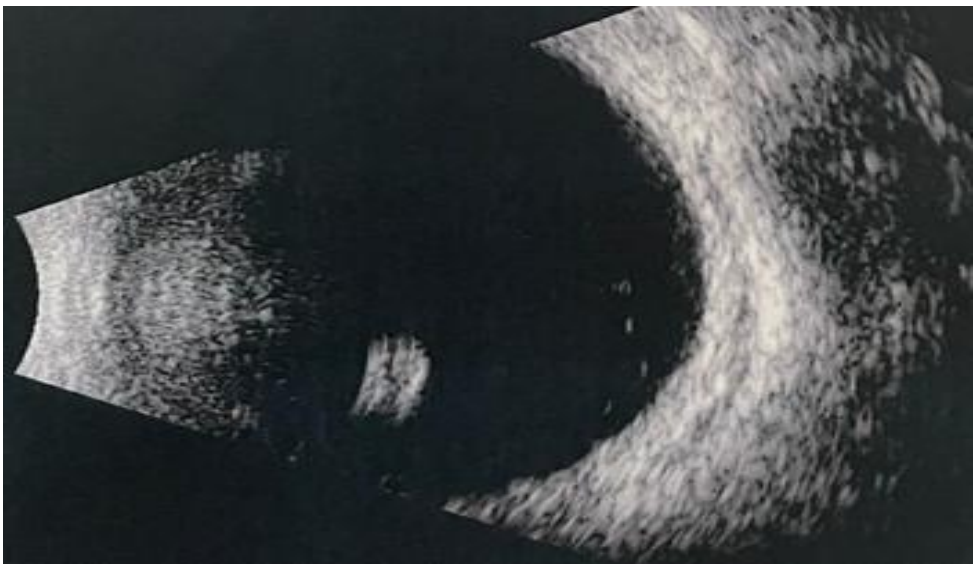

Figure 2: Ocular ultrasound revealing a 1.9/4.5mm oval formation in the anterior vitreous.

DISCUSSION

Vitreous cysts are rare and often asymptomatic.

The mean age of presentation ranges from 5 to 68 years, but most cases are reported in patients aged 10 to 20 years(2–4). Delayed detection is partly due to infants' inability to express visual impairments.

Both pigmented and non-pigmented vitreous cysts are found. The origin of these vitreous cysts still remains uncertain. Pigmented vitreous cysts are thought to originate in the iridal pigmented epithelium, while non-pigmented cysts originate in the hyaloid vasculature(5).

Vitreous cysts are classified as congenital (primary) or acquired. Acquired vitreous cysts have been found in a variety of pathologies, such as trauma, degeneration, inflammation, infection or a potential complication of retinal detachment procedure, uveitis, retinitis pigmentosa, retinoschisis and choroidal atrophy(3,6).

The positive diagnosis is clinical, but further investigations, notably infectious serologies, ocular ultrasound and UBM, are necessary to rule out other possible etiologies(7).

No specific treatment is required for primary vitreous cysts. Refractive correction and management of amblyopia are the mainstays of treatment when there is no obstruction of the visual axis, as in our patient's case. However, surgical removal (cyst drainage through pars plana vitrectomy) or Argon or Yag laser ablation can still be considered when the cyst is symptomatic(6). Complications such as incomplete cyst fragmentation, iatrogenic retinal burns, cataracts, secondary inflammation or epiretinal membrane formation may occur after laser treatment(8).

CONCLUSION

Congenital vitreous cysts are rare and benign lesions. Differential diagnosis with acquired cysts requires careful clinical examination and additional serological tests. Management is codified and depends on the clinical impact of the cyst. In children, it is important to watch for any signs of amblyopia in order to take early action.

Acknowledgments : None.

Conflict of interest : None

Informed consent : Written informed consent was obtained from a legally authorized representative, which in this case was the patient's parents, for anonymized patient information to be published in this article.

Funding statement : The author(s) received no financial support for the research, authorship, and/or publication of this article.

REFERENCES

1. Tansley JO. Cyst of the vitreous. Trans Am Ophthalmol Soc. 1899;8:507-9.
2. Moreno-Arrones JP, Jiménez-Parras R. Quiste vítreo: a propósito de un caso. Arch Soc Esp Oftalmol. janv 2012;87(1):20-2.
3. Sethi A, Lokwani P, Sethi V, Sethi S, Sethi A, Sethi R. An Unusual Case of Solitary Idiopathic Pigmented Vitreous Cyst. Middle East Afr J Ophthalmol. 2020;27(1):62-4.
4. Cruciani F, Santino G, Salandri AG. Monolateral idiopathic cyst of the vitreous. Acta Ophthalmol Scand. oct 1999;77(5):601-3.
5. E. N'Guyen PG. Anomalies de développement du vitré. Rapport SFO - Ophtalmologie pédiatrique. 2017;
6. Robben P, Van Ginderdeuren R, Thoma D, Deghislage C, Van Calster J, Blanckaert J, et al. Primary vitreous cysts. GMS Ophthalmol Cases. 2 avr 2020;10:Doc18.
7. Jethani J, Maria N, Shetty S, Vijayalakshmi P. Pigmented free-floating retrolental space cyst. J Cataract Refract Surg. avr 2007;33(4):741-2.
8. Mohan A, Kaur N. Congenital vitreous cyst in a child: A rare case report. Kerala J Ophthalmol. déc 2016;28(3):208.