Scholars Journal of Medical Case Reports
Abbreviated Key Title: Sch J Med Case Rep
ISSN 2347-9507 (Print) | ISSN 2347-6559 (Online)
Journal homepage: https://saspublishers.com

OPEN ACCESS

Maxillofacial Surgery

Cystic Orbital Lymphangioma in Children: A Case Report

M. Bouksirat (Dr)[1*], R. El Azzouzi (Dr)[1], S. Benwadih (Pr)[1], M. Boulaadas (Pr)[1]

[1]Maxillofacial Surgery Department, Hospital of Specialties, Mohammed V University, Rabat, Morocco

DOI: https://doi.org/10.36347/sjmcr.2026.v14i04.062 | **Received:** 02.03.2026 | **Accepted:** 21.04.2026 | **Published:** 29.04.2026

***Corresponding author:** M. Bouksirat
Maxillofacial Surgery Department, Hospital of Specialties, Mohammed V University, Rabat, Morocco

Abstract | **Case Report**

Orbital cystic lymphangioma is a rare benign vascular malformation that typically presents in childhood. It may manifest as progressive exophthalmos and can be complicated by hemorrhage. We report the case of a 7-year-old girl presenting with progressive left-sided exophthalmos associated with divergent strabismus. Imaging suggested a cystic intraorbital lesion, and the diagnosis of cystic lymphangioma was confirmed by histopathological examination following complete surgical excision. The postoperative course was favorable, with no recurrence at 6 months.

Keywords: Orbital lymphangioma, cystic lymphangioma, pediatric exophthalmos, orbital tumor, vascular malformation; MRI orbit.

INTRODUCTION

Orbital lymphangiomas belong to the spectrum of low-flow vascular malformations arising from congenital abnormalities of the lymphatic system. Although histologically benign, their clinical behavior can be locally aggressive due to their infiltrative and non-encapsulated nature. Orbital localization remains rare but is of particular concern given the risk of visual compromise and orbital deformity.

These lesions often pose diagnostic and therapeutic challenges. Advances in imaging, especially MRI, have improved diagnostic accuracy, while management strategies remain debated, ranging from conservative monitoring to surgical intervention.

CASE PRESENTATION

A 7-year-old female patient was referred for evaluation of a progressive protrusion of the left eye evolving over 9 months. The condition was associated with divergent strabismus but was not accompanied by visual acuity loss or any prior history of ocular trauma.

On physical examination, a bluish discoloration of the left upper eyelid was noted, predominantly on the medial side, along with superficial telangiectatic vessels. No inflammatory signs were observed. The exophthalmos was non-axial, with inferolateral displacement of the globe.

Ophthalmological assessment demonstrated preserved visual acuity, intact pupillary responses, and full ocular motility without diplopia. However, divergent strabismus was confirmed.

Magnetic resonance imaging of the orbit and brain revealed a well-demarcated cystic intraorbital lesion, strongly suggestive of a lymphatic malformation.

Surgical management was undertaken under general anesthesia, allowing complete excision of the lesion. Histopathological examination established the diagnosis of orbital cystic lymphangioma.

Postoperative recovery was uneventful. At 6-month follow-up, the patient remained asymptomatic, with no clinical or radiological evidence of recurrence.

Fig. 1: A: Left non-axial, inferolateral exophthalmos
B: Follow-up after 6 months

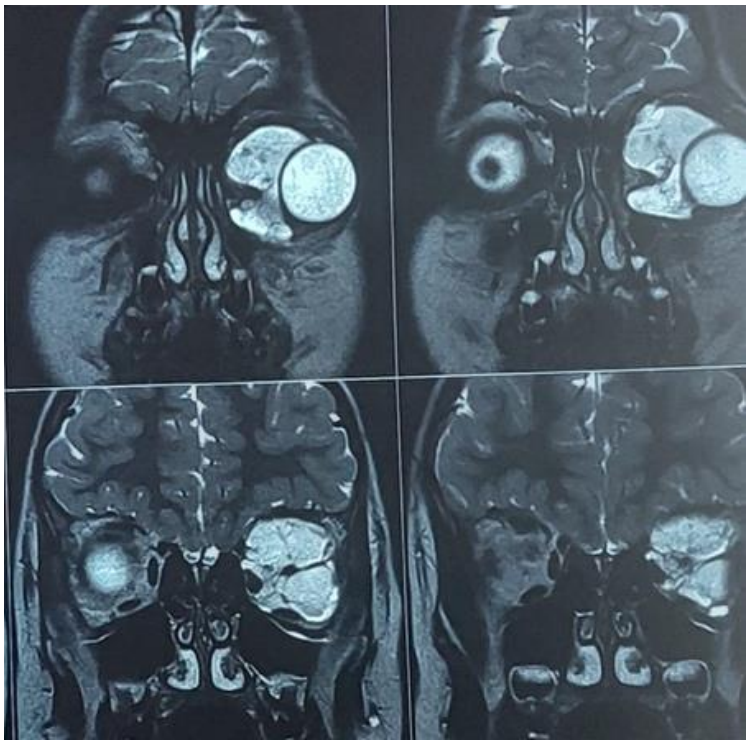

Fig. 2: Coronal section showing a heterogeneous, polylobulated lesion with fluid-intensity signal of variable intensity.

DISCUSSION

Subaacute exophthalmos in children should raise suspicion of an orbital tumor until proven otherwise. Rhabdomyosarcoma is the malignant tumor that must be ruled out as a matter of urgency [1].

A lymphangioma is a benign cystic tumor resulting from a malformation of the lymphatic vessels; it most commonly occurs in the head and neck region in children. Orbital involvement is rare (1–2% of all orbital tumors) [2] and remains an exceptional cause of exophthalmos.

Additional imaging examinations are essential to confirm the diagnosis. Doppler ultrasound demonstrates a cystic tumor with slow flow, but MRI remains the reference examination and allows visualization of heterogeneous, multilobulated tumors with fluid signal intensity that varies depending on hemorrhagic episodes of different ages. Furthermore, MRI enables the search for other localizations (palate, cheek, intracranial extension, etc.) and helps characterize the lesion as either a pure orbital lymphangioma or a diffuse form with eyelid infiltration [3].

These tumors are poorly encapsulated and highly infiltrative, making surgical dissection difficult or even impossible. The currently recommended therapeutic approach is mainly conservative, and surgical excision is indicated in cases of acute hemorrhage with optic nerve compression, severe proptosis with corneal exposure, or significant cosmetic impairment [4–5].

In addition to surgery, other therapeutic options have been tested (corticosteroid injections, sclerotherapy); however, the results are not satisfactory and may sometimes be harmful to visual function.

The risk of postoperative intralesional hemorrhage or tumor recurrence is significant, especially in cases of partial resection (58% of cases) [6–7].

Due to its often locally and locoregionally infiltrative nature, sometimes leading to major functional and aesthetic consequences, the prognosis of orbital lymphangiomas generally remains guarded. However, our case illustrates a lymphangioma with a favorable outcome, likely due to the less infiltrative nature of the tumor, timely management, and the quality of surgical excision, highlighting the importance of regular long-term follow-up.

Conclusion

Orbital cystic lymphangioma should be considered in the differential diagnosis of pediatric exophthalmos. MRI is indispensable for diagnosis, and histopathological confirmation remains the gold standard. Management should be individualized, and complete surgical excision, when achievable, can lead to favorable outcomes.

References

1. Valentin Montero: lymphangiome orbitaire à propos d'un cas
2. Naggara O, Koskas P, Lafitte F, *et al.,*Les lésions vasculaires de l'orbite. J Radiol 2006; 87:17—27.
3. P.V. Jacomet Orbital lymphangioma in a child: diagnosis and surgical treatment. Images en Ophtalmologie • Vol. V • n° 3 • juillet-août-septembre 2011
4. Harris GJ, Sakol PJ, Bonavolont G, De Conciliis C. An analysis of thirty cases of orbital lymphangioma. Pathophysiologic consi- derations and management recommendations. Ophthalmology 1990; 97:1583—92.
5. Wilson ME, Parker PL, Chavis RM. Gestion conservatrice du lym- phangiome orbital de l'enfant. Ophtalmologie 1989; 96:484—9.
6. Hayasaki A, Nakamura H, Hamasaki T, *et al.,* Successful treat- ment of intraorbital lymphangioma with tissue fibrin glue. Surg Neurol 2009; 72:722—4.
7. Tunc M, Sadri E, Char DH. Orbital lymphangioma: an analysis of 26 patients. Br J Ophthalmol 1999; 83:76—80.