analesdepediatría
www.analesdepediatria.org

IMAGES IN PAEDIATRICS

Infantile orbital hemangioma: A case report

Hemangioma infantil orbitario: a propósito de un caso

Rachid Bouchikh-El Jarroudi[a,*], Hugo González-Valdivia[b], Mariana Planells-Alduvín[c], Mariana Alvarez-Vukov[d]

[a] *Servicio de Oftalmología, Hospital Universitari Germans Trias i Pujol, Badalona, Barcelona, Spain*
[b] *Servicio de Oftalmología, Hospital Sant Joan de Déu, Esplugues de Llobregat, Barcelona, Spain*
[c] *Servicio de Radiología, Hospital Sant Joan de Déu, Esplugues de Llobregat, Barcelona, Spain*
[d] *Servicio de Anatomía Patológica, Hospital Sant Joan de Déu, Esplugues de Llobregat, Barcelona, Spain*

An infant aged 4 months was referred for assessment of a purplish mass in the posterior surface of the right upper eyelid (Fig. 1), with no other abnormalities in the ophthalmological examination. Magnetic resonance imaging revealed a well-defined intramuscular mass in the superior rectus muscle of the right eye with characteristics suggestive—but not pathognomonic—of hemangioma (Fig. 2). The patient underwent an incisional biopsy at age 9 months. The histological analysis revealed proliferation of small-caliber vessels without atypia. Immunohistochemical staining was positive for GLUT-1, CD34 and WT-1, confirming the diagnosis of infantile hemangioma (Fig. 3). The patient started treatment with oral propranolol (Hemangiol), which was well tolerated and achieved a favorable response.[1] Follow-up MRI scans showed progressive involution and fibrotic changes.

Infantile hemangioma is the most frequent benign vascular tumor of infancy; it is absent at birth to then present in the first weeks of life, with a natural history in three phases: proliferation, stabilization and involution.[2] The differential diagnosis includes rapidly involuting congenital hemangioma, present from birth and with rapid spontaneous involution, and non-involuting congenital hemangioma,

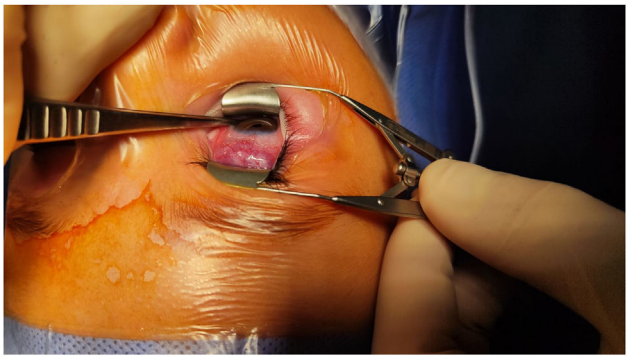

Figure 1 Presentation. Intraoperative image showing the gross appearance of the lesion before performance of biopsy, with visualization of a purplish mass in the posterior surface of the right upper eyelid, resembling a morula, with a vascular appearance.

DOI of original article:
https://doi.org/10.1016/j.anpedi.2025.503967
* Corresponding author.
E-mail address: rachid.bascara@gmail.com
(R. Bouchikh-El Jarroudi).

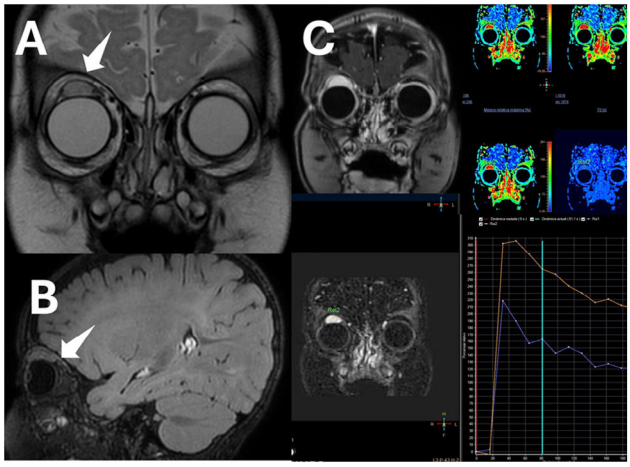

Figure 2 Magnetic resonance imaging. (A) Coronal view and (B) sagittal view showing a homogeneous lesion, hyperintense on T2-weighted imaging, in the distal portion of the superior rectus muscle of the right eye, near the insertion on the globe, measuring 16 × 14 × 16 mm (anteroposterior × transverse × craniocaudal diameters), with a hypointense border corresponding to a pseudocapsule, showing facilitated diffusion, without calcification or bleeding within the lesion. (C) Dynamic contrast-enhanced MRI, fat-suppressed T1-weighted images showing a type 3 kinetic curve with a rapid uptake followed by a progressive reduction on the late phase (washout). Post-contrast imaging of the right superior rectus muscle showing homogeneous enhancement.

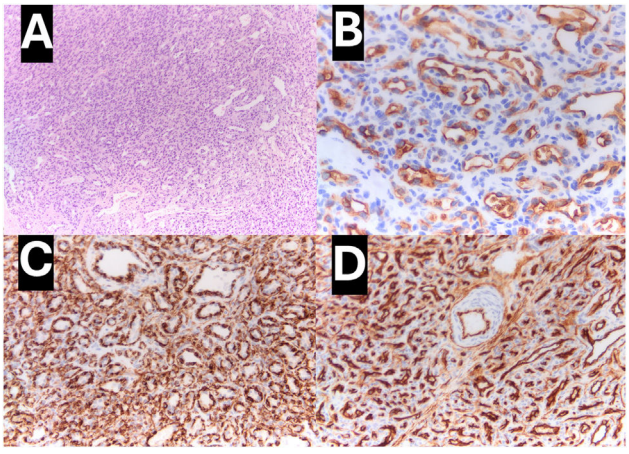

Figure 3 *Histological analysis of the specimen.* (A) Hematoxylin-eosin stain showing proliferation of small vascular structures with a nodular arrangement over a thin collagenized stroma; immunohistochemistry positive for (B) GLUT-1, (C) WT-1 and (D) CD34.

which persists over time and is negative for GLUT-1 expression.[3]

The salient features of this case were the atypical location combined with the typical clinical course of orbital infantile hemangioma.

References

1. Sebaratnam DF, Rodríguez Bandera AL, Wong LCF, Wargon O. Infantile hemangioma. Part 2: management. J Am Acad Dermatol. 2021;85:1395–404, http://dx.doi.org/10.1016/j.jaad.2021.08.020.
2. Rodríguez Bandera AI, Sebaratnam DF, Wargon O, Wong LCF. Infantile hemangioma. Part 1: epidemiology, pathogenesis, clinical presentation and assessment. J Am Acad Dermatol. 2021;85:1379–92, http://dx.doi.org/10.1016/j.jaad.2021.08.019.
3. Mulliken JB, Enjolras O. Congenital hemangiomas and infantile hemangioma: missing links. J Am Acad Dermatol. 2004;50:875–82, http://dx.doi.org/10.1016/j.jaad.2003.10.670.