

IMAGES IN PAEDIATRICS

Infantile orbital hemangioma: A case report

Hemangioma infantil orbitario: a propósito de un caso



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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

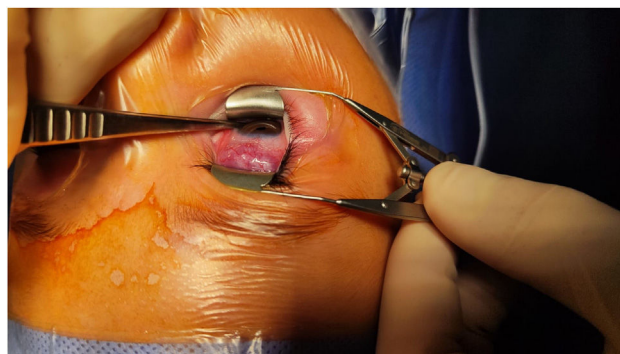


Figure 1 Presentation. Intraoperative image showing the gross appearance of the lesion before performance of biopsy, with visualization of a purplish mass in the posterior surface of the right upper eyelid, resembling a morula, with a vascular appearance.

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,

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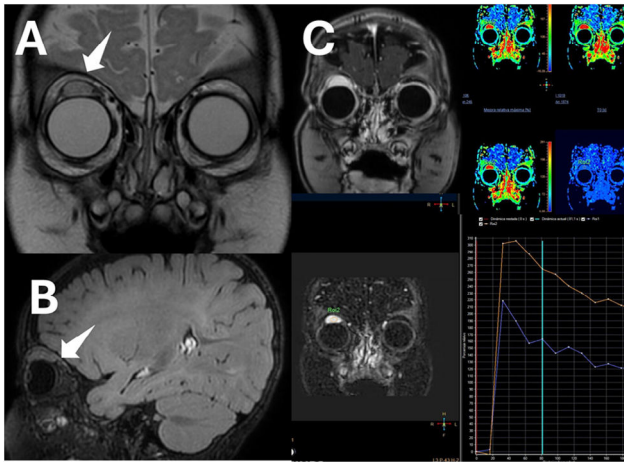


Figure 2 Magnetic resonance imaging. (A) Coronal view and (B) sagittal view showing a homogeneous lesion, hyperintense on T2-weighted imaging, in the distal portion of the superior rectus muscle of the right eye, near the insertion on the globe, measuring $16 \times 14 \times 16$ mm (anteroposterior $\times$ transverse $\times$ 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.

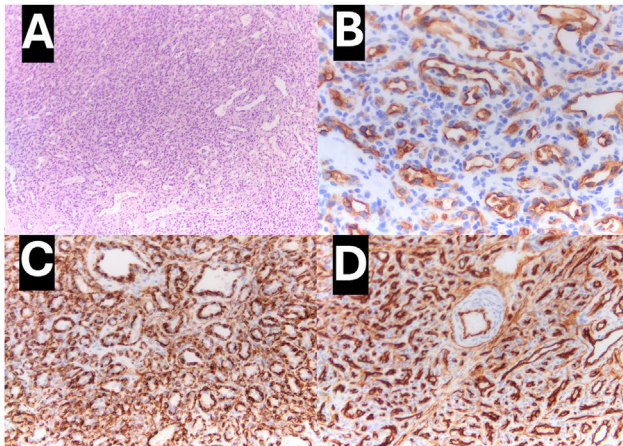


Figure 3 Histological analysis of the specimen. (A) Hematoxylin-eosin stain showing proliferation of small vascular structures with a nodular arrangement over a thin collagenized stroma; immunohistochemistry positive for (B) GLUT-1, (C) WT-1 and (D) CD34.

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.

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