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Medial Canthal Infantile Hemangioma: An Unusual Cause of Eyelid Swelling in an Infant

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AUTHOR AND AFFILIATION

Alia Yassine Kassab¹, Latifa Chat¹, Mehdi Salmane¹, Siham El Haddad¹, Nazik Allali¹, Lina Belkouchi¹

¹Department of Radiology, Mother-Child Hospital, Faculty of Medicine and Pharmacy in Rabat, Mohammed V University in Rabat, Rabat, Morocco

Corresponding author : Alia Yassine Kassab

ABSTRACT

Infantile hemangioma is the most common benign vascular tumor of infancy and may involve the periocular region, potentially leading to visual complications. We report the case of a 6-month-old infant presenting with medial swelling of the right upper eyelid. Ophthalmologic examination revealed papilledema and hemorrhage along the superior temporal arcade. Orbital magnetic resonance imaging (MRI) demonstrated a well-defined enhancing soft tissue lesion located at the medial canthus of the right eye, suggestive of an infantile hemangioma. This case highlights the importance of MRI in characterizing orbital and periocular vascular lesions and excluding intra orbital extension.

KEYWORDS

Infantile hemangioma, Medial canthus, Orbital MRI, Pediatric orbital tumor, Vascular lesion, Eyelid swelling.

MAIN ARTICLE

INTRODUCTION

Infantile hemangiomas are benign vascular tumors commonly occurring during infancy, with frequent involvement of the head and neck region. Periocular hemangiomas are clinically important because of their potential ophthalmologic complications, including amblyopia, astigmatism, and optic nerve compression. Magnetic resonance imaging (MRI) plays an important role in lesion characterization, assessment of extension, and differential diagnosis. [1,2].

CLINICAL PRESENTATION

A 6-month-old infant presented with medial swelling of the right upper eyelid evolving over several months.

Fundoscopy examination demonstrated papilledema associated with hemorrhage along the superior temporal vascular arcade. An MRI was required by clinician.

MRI Findings revealed :

- Presence of an oval-shaped soft tissue lesion located at the medial canthus of the right eye, relatively well circumscribed with lobulated margins, measuring 14×11 mm.
- The lesion demonstrated isointense signal on T1-, T2-, and FLAIR-weighted sequences, with intense and homogeneous enhancement after gadolinium administration. (Figures 1 and 2)

DISCUSSION

Infantile hemangioma is the most frequent vascular tumor in infancy and usually appears during the first months of life. Orbital and periocular localizations account for a significant proportion of pediatric orbital masses.

Clinical Presentation

Patients may present with:

- Eyelid swelling

- Periocular mass
- Ptosis
- Visual disturbances
- Proptosis in extensive lesions

In the present case, swelling of the medial upper eyelid was the main presenting symptom.

Radiological Features [3]

MRI is the imaging modality of choice for evaluating periocular vascular lesions.

Typical MRI features include:

- Well-defined lobulated soft tissue mass
- Iso- to hypointense signal on T1-weighted images
- Hyperintense or intermediate signal on T2-weighted images (Figure 1A, 1B)
- Strong homogeneous enhancement after gadolinium injection (Figure 2)
- Absence of diffusion restriction

The imaging appearance in this case strongly favored a benign vascular lesion consistent with infantile hemangioma.

Differential Diagnosis

The differential diagnosis includes:

- Dermoid cyst
- Lymphatic malformation
- Capillary malformation
- Rhabdomyosarcoma
- Dacryocystocele
- Orbital cellulitis [3, 4].

Management

Management depends on lesion size, location, and associated visual complications. Treatment options include:

- Clinical observation for small uncomplicated lesions
- Beta-blocker therapy (propranolol)
- Corticosteroids in selected cases
- Surgical management for complicated lesions

Early diagnosis is important to prevent visual impairment [3,5].

CONCLUSION

This case illustrates a typical presentation of infantile hemangioma involving the medial canthus in a 6-month-old infant. MRI was essential for lesion characterization and exclusion of intraorbital extension. Recognition of characteristic imaging findings allows accurate diagnosis and appropriate therapeutic management.

FIGURES

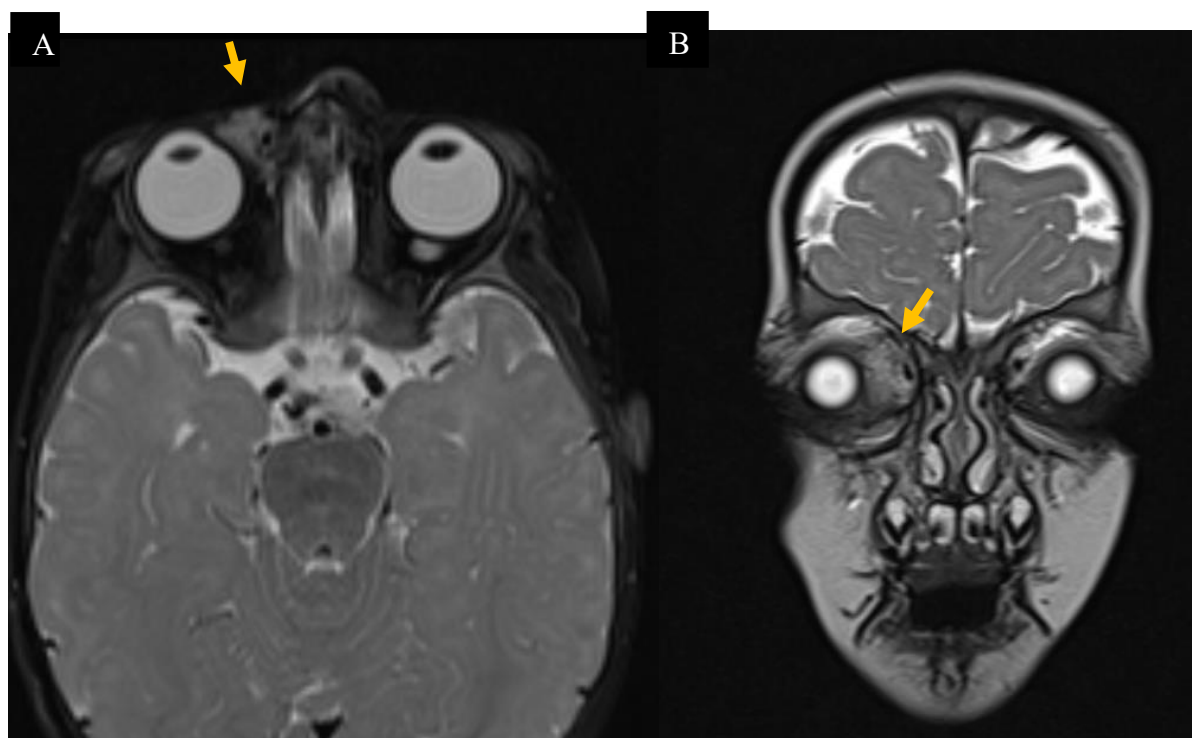


Figure 1 : Axial and coronal orbital MRI showing an oval-shaped soft tissue lesion of the right medial canthus, relatively well circumscribed with lobulated margins, isointense on T2-weighted images (Yellow arrow).

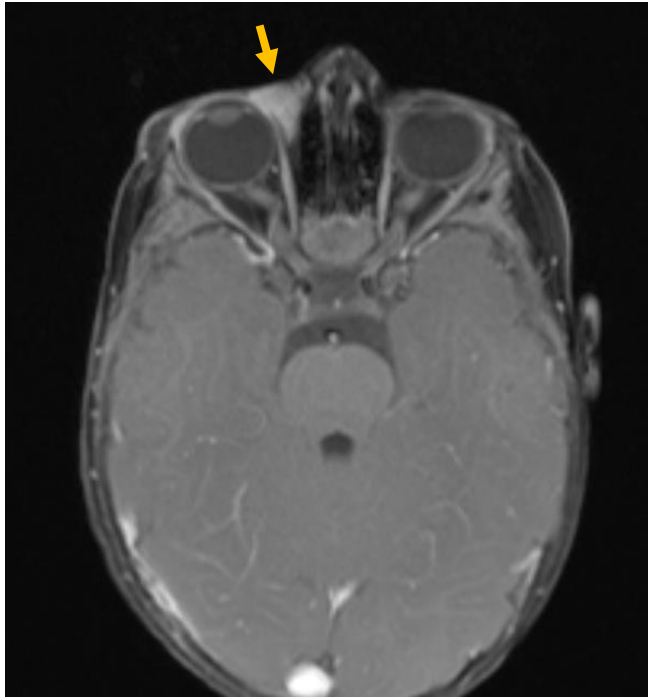


Figure 2 : Axial orbital MRI sequence showing homogeneous enhancement after gadolinium administration.

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