



## Cavernous hemangioma of Orbit in a Child: A Case Report

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### Abstract

*Ocular and orbital tumors, both benign and malignant, occur relatively frequently in infants and children. Benign masses are much more common than malignant in the orbital region. We report an unusual presentation of an orbital cavernous hemangioma in a 1.5-year-old female, who had sudden redness and swelling of the right eye on waking up. At presentation, upper eyelid edema with periorbital ecchymosis and subconjunctival hemorrhage were noted in the right eye. Right eye showed axial proptosis. Magnetic resonance imaging revealed an intraconal soft tissue mass in the superolateral quadrant of the right orbit. Superior orbitotomy with mass excision was done; histopathological examination of the excised mass revealed a cavernous hemangioma.*

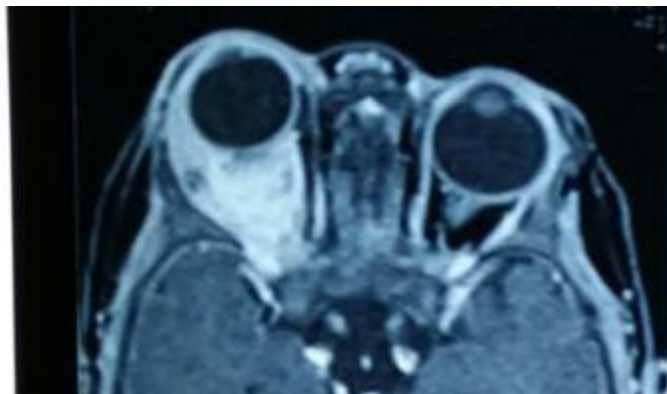
### Introduction

Most pediatric orbital tumors are benign with capillary hemangioma being the most common benign orbital tumor in children. Cavernous hemangiomas are the most common benign tumors in adults. Although a rudimentary lesion may be present at birth, cavernous hemangiomas do not usually become symptomatic until the third to fifth decade of life.<sup>1,2</sup> This article reports a case of orbital cavernous hemangioma in a 1.5-year-old girl.

### Case Report

A 1.5 year-old girl presented with painful protrusion of the right eye in eye outdoor at MGM Medical College, Kishanganj. At presentation,

upper eyelid edema with periorbital ecchymosis and subconjunctival hemorrhage were noted in the right eye. Right eye showed axial proptosis. B-scan ultra sonography (USG) showed a low to moderate reflective well-encapsulated mass lesion arising from the lateral rectus muscle. The lesion measured 28 mm x 15.5 mm in dimension. MRI Brain showed heterogeneously hyperintense gross moderate enhancing lesion in intraconal portion of right orbit with mass effect and extension into surrounding structures suggestive of cavernous hemangioma. (figure 1).



**Figure 1.** Right sided orbital cavernous hemangioma

Superior orbitotomy with mass excision was done; histopathological examination of the excised mass revealed a cavernous hemangioma. The postoperative period was uneventful.

### Discussion

Vascular lesions of the orbit constitute approximately 10 to 15 % of orbital tumors. Cavernous hemangiomas are the most common vascular lesions of the orbit in adults, being commonly seen in middle age, with a female predilection but relatively rare in children.<sup>1,3</sup> Capillary hemangioma is the most common orbital vascular tumor of childhood. Over 80% of orbital cavernous hemangiomas are located within the intraconal compartment, most commonly in the lateral aspect as in our case.<sup>4</sup> They are therefore among the important causes of non-inflammatory proptosis. A variety of orbital tumors can occur in children with benign lesions being much more common than malignant ones. However, childhood tumors show variable presentations and sometime it is difficult to clinically differentiate benign from malignant lesions. The overall incidence of ophthalmic malignancy is greater during the first five years of life. The main differential diagnoses in a child with proptosis include inflammatory/infectious lesion, structural lesion (dermoid cyst), vascular lesion (capillary hemangioma) lymphoproliferative disease, neurogenic tumor, mesenchymal tumor and metastatic carcinoma.<sup>5</sup>

In our case the absence of trauma, relative short history of proptosis and proximity of lesion to the extraocular muscle in a child was clinically suggestive of malignancy. Although cavernous hemangioma is a common benign tumor of adults, it should be considered in the differential diagnosis of a child with unilateral proptosis.

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