



A RARE CASE OF ACQUIRED CAPILLARY HEMANGIOMA OF MEDIAL CANTHUS OF RIGHT EYE

Ophthalmology

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ABSTRACT

Capillary Hemangioma is the most common benign periorbital tumor of childhood and infantile capillary hemangioma is shown to affect up to 5% of infants below the age of 1 year.[1] Acquired capillary hemangioma of eyelid is very uncommon in adults and very few cases have been reported in the literature till present.[4] Here we report a case of a 24-year-old female who came with growth in the inner aspect of right eye associated with itching since 6 months. On examination, 8x7mm red colored mass was noted in the medial aspect of right eye, situated 10mm from nasal limbus involving palpebral fissure and extending 2mm into the upper palpebral conjunctiva. The mass was soft in consistency, lobulated, did not bleed on touch and was not tender. It was freely mobile and pulsations were absent. Patient was started on Topical steroids and Timolol Maleate 0.5% eyedrops but there was no reduction in the size of the lesion and complaints persisted. The patient was managed with surgical excision of mass and hemostasis with ligation of feeder vessels was done. HPE report of the excised intra-operative specimen was sent which was suggestive of capillary hemangioma of medial canthus of right eye.

KEYWORDS

Acquired Capillary Hemangioma, Eyelid , Surgical excision, Ligation of feeder vessels

INTRODUCTION

Capillary Hemangiomas usually present within the first few weeks or months of life. Initial increase in size within the first year of life followed by spontaneous regression in the following years is the usual course of the disease. Acquired capillary hemangioma of eyelid and periocular region is a very rare entity. They have predilection for upper eyelid and brow, and they do not involute like their infantile counterparts. Females are more commonly affected than males. (3:1) The exact etiology is unknown but it has been associated with hormonal changes and increased estrogen levels during puberty and pregnancy.

Over-expression of angiogenic growth factors including Vascular endothelial growth factor(VEGF) is associated with capillary hemangioma. Non regressive nature of the lesion, cosmetic visual obstruction, prevention of accidental trauma, bleeding and very rarely visual impairment are the main reasons for seeking treatment.

Case Study

A 24-year-old female came with growth in the inner aspect of right eye associated with itching for 6 months. The patient noticed the growth to be cosmetically disturbing for which she sought opinion from a local doctor where she was diagnosed to have hematoma and advised watchful observation. She was started on topical steroid eyedrops (Loteprednol E/D 1 drop in Right eye QID) and Naphazoline eyedrops BD in right eye. The lesion showed no signs of resolution, and she went for a repeat consultation and diagnosed to have hemangioma and was advised cryo-diathermy for the same. She was started on Timolol Maleate 0.5% eyedrops and was referred to our institute for surgical management. There was no history of sudden increase in size of the growth, no diminution/blurring of vision, no double vision, no abnormal protrusion of the eye and no pain, discharge or spontaneous bleeding. There was no past history of trauma and prior ocular surgery.

On ophthalmological examination visual acuity was 6/6 in both eyes. The intraocular pressure was 12mm Hg in right eye and 14 mmHg in left eye. The fundus examination in both eyes was normal.

On slit lamp examination, hyperemia of upper palpebral conjunctiva with few tortuous vessels was noted. An 8x7mm red colored mass was noted in the medial aspect of right eye, situated 10mm from nasal limbus involving palpebral fissure and extending 2-3mm into the upper palpebral conjunctiva. [Figure 1].

The mass was soft in consistency, lobulated, did not bleed on touch and was not tender. It was freely mobile, and pulsations were absent. Few prominent feeder vessels were seen medially over the growth. [Figure 2].



Figure 1: Red fleshy mass near the medial canthus involving the palpebral fissure and extending into upper palpebral conjunctiva



Figure 2: Smooth, lobulated mass with feeder vessels extending medially over the growth

Investigations

Hemoglobin: 13.5 g/dL

Total Leucocyte Count: 8300 cells/mm³

Differential Leucocyte Count: Neutrophils- 52%, Lymphocytes- 38%, Eosinophils-9%, Monocytes-1%, Basophils-0%
ESR-13mm/hr

Blood Grouping: O positive

HPE Report

Sections showed polypoidal tissue lined by stratified squamous

epithelium. Sub epithelium showed small to intermediate caliber blood vessels lined by flattened endothelial cells. Areas of hemorrhage were noted. Fibrotic stroma was seen surrounding blood vessels.[Figure 3] Impression was suggestive of Capillary Hemangioma of medial canthus of right eye.

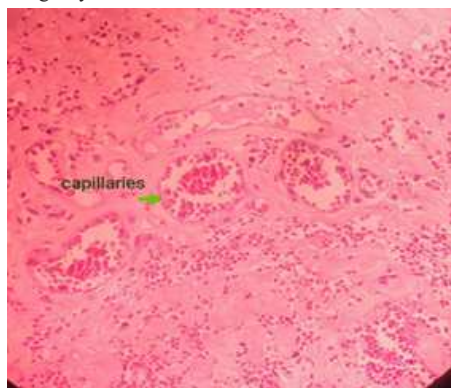


Figure 3: Histopathology report of excised specimen showing small to intermediate caliber blood vessels lined by flattened endothelial cells s/o capillary hemangioma.

Management

Surgical excision of mass was done and hemostasis achieved with ligation of feeder vessels. Excision biopsy was suggestive of capillary hemangioma of medial canthus of right eye.

Post-operatively the patient was started on antibiotic-steroid combination eyedrops (Gatifloxacin 0.3% + Prednisolone acetate 1% in RE 6times/day) Hydroxypropyl methylcellulose ointment (HPMC) thrice a day for local application in RE and oral Ethamsylate 500mg (1/2-0-1/2) for 3 days.



Figure 4: Post-operative day 1 photo showing a subconjunctival hemorrhage along 12 to 5'o clock hours with five conjunctival sutures intact

DISCUSSION

Hemangiomas usually present as red lesions which are elevated and are development malformations of blood vessels. They can be either sessile or pedunculated.

They are classified as congenital, infantile and acquired based on the age of presentation. Congenital hemangiomas present in full size in birth whereas infantile hemangiomas present at birth, grow postnatally followed by involution.

Acquired capillary hemangiomas are usually seen in adults but have also been reported in pediatric age groups and gradually increase in size.

The management of conjunctival hemangiomas depends on presentation, growth and extent of tumor.

Various studies have shown complete resolution of capillary hemangiomas in infants with oral or topical beta-blockers which act by inhibition of vasoconstriction and angiogenesis. Topical beta blockers

are preferred as they reduce the systemic side effects seen with oral medication such as bronchospasm, bradycardia, hypoglycemia and cardiac failure.

The lesions resistant to medical management can be treated by excision, cryotherapy and radiotherapy.

In our study, the patient showed no signs of improvement despite being on topical corticosteroids as well as topical beta-blocker(Timolol Maleate 0.5%) hence patient was managed with surgical excision of the mass, hemostasis was achieved with ligation of feeder vessels. There was no recurrence on 1 month follow up.

CONCLUSION

Acquired capillary hemangiomas of the eyelid are rare occurrences and excision of lesion and biopsy is the mainstay of management which not only helps in reaching the diagnosis and ensures complete removal of lesion. Recurrence rate remains a challenge and can warrant re-surgery.

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