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Ophthalmology

ACQUIRED CAPILLARY HAEMANGIOMA: A CASE REPORT

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ABSTRACT We report a case of 60-yr-old male who presented with complaint of reddish mass on right upper eyelid since 2 months. A diagnosis of acquired capillary haemangioma was made based on clinical features and B-scan findings and excision biopsy was done followed by histopathological examination of the specimen which confirmed our diagnosis. Acquired capillary haemangioma are of rare occurrence and according to our review of literature only nine cases have been documented so far which make its proper diagnosis and management very crucial for further understanding of this entity.

KEYWORDS: Acquired capillary haemangioma, excision biopsy, B-Scan

INTRODUCTION

Capillary Haemangioma is a benign tumor caused by abnormal growth of anastomosing small vascular channels without true encapsulation. It is most common tumor of orbit and periocular area in childhood encompassing nearly 5-10% of all soft tissue tumors of infancy [1]

According to the age of presentation, capillary haemangiomas can be further classified into congenital, infantile, and acquired with infantile haemangiomas being most common type. Congenital haemangiomas present in its full size at birth. Infantile haemangiomas typically occurs at birth or within the first 2 months of life. They grow rapidly for 3-6 months followed by involution in which 30% of lesions resolve by the age of 3 years and 75% by the age of 7 years. [1,10] Acquired capillary haemangiomas are usually seen in adults and they gradually increase in size. Histologically they are similar to infantile forms but Acquired Capillary Haemangioma do not involute like their infantile counterparts which make its diagnosis and treatment necessary.

Case Report

A 60-year-old male presented in our ophthalmology OPD with a reddish mass on right upper eyelid since 2 months which was indeterminate in onset and gradually progressive in size associated with drooping of eyelid. It was not associated with pain, watering or discharge. There was no history of ocular trauma, systemic illness or previous history of similar lesions.

On general examination he was conscious, alert and well oriented to time, place and person with stable vitals. All routine blood investigations were normal.

On ocular examination, visual acuity was Right Eye counting fingers> 3feet, Left Eye-6/18, Pin Hole – Not Improved and Intra Ocular Pressure -14 mmHg in both eyes. A reddish pedunculated swelling of size 3.5 cm in length and 3.5 cm in width was present on right upper eyelid. It had irregular surface and crusting on overlying skin, nontender, non-mobile, firm in consistency, non-compressible, nonpulsatile and translucent. There was mechanical ptosis of grade-3 of right upper eyelid [Fig.1]. Rest of the anterior segment evaluation and dilated fundus examination were within normal limits.



Fig. 1- Clinical Picture At The Time Of Presentation

B-scan of right eye showed a well defined echogenic lesions of size approx. 19mm in length and 12mm in width arising from right eye

upper lid showing internal vascularity suspected of neoplastic etiology. A diagnosis of the acquired capillary haemangioma was made based on history and clinical findings.

Excisional biopsy of the mass was performed and hemostasis maintained. The wound was repaired with 6-0 vicryl suture. The biopsy specimen was sent for histopathological examination.

Gross histopathological examination showed single, globular, soft to firm tissue mass covered with skin. Skin was hyperpigmented and non-hairy. On cut-section, it appeared solid and greyish white. Histological section of mass stained with hematoxylin and eosin shows numerous small capillaries lined by plump endothelial cells suggestive of capillary haemangioma thus confirming our diagnosis [Fig.2].

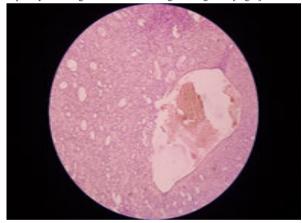


Fig.3-Histopathological Slide

The patient was assessed on 15th post operative day. He was symptomatically better with healthy wound margins. A small residual lesion was present on lid margins for which cryotherapy was done.

DISCUSSION

Acquired capillary haemangioma of the eyelid is very uncommon in adults. We performed a review of literature and found that only nine cases have been reported so far belonging to the age group of 10 to 49 yrs [2.3.4.5.6.78] The main etiological factors responsible for development of acquired capillary haemangioma are hormonal changes during puberty and pregnancy, trauma and exposure to irritative agents. [45] Female are three times more prone to develop haemangiomas. [60]

The acquired form of capillary haemangiomas is histological identical to mature type of congenital capillary haemangioma. The immature stages of these lesions have numerous newly formed capillaries with narrow lamina. On maturing, the vascular lamina of these lesions becomes dilated with flattened endothelial cells and edematous

hyalinized stroma and blood flow establishes.[8] The tumor consists of CD34-positive, GLUT-1 negative endothelial cells and SMA-positive pericytes arranged in macro-or micro lobules.

It is important to rule out other differential diagnosis of acquired capillary haemangiomas which includes pyogenic granuloma, angiosarcoma and acquired tufted angioma of the eyelids, Kaposi sarcoma, cavernous haemangioma, angiosarcoma, and intravascular papillary endothelial hyperplasia.1

Possible acceptable indication for medical intervention includes rapidly enlarging lesions, obstruction of the visual axis, significant induced astigmatism and cosmetic concerns.

The treatment modalities currently available are intralesional and systemic steroids, interferon alpha, topical timolol maleate, oral propranolol, laser treatment and surgical excision. In our case, the patient had acquired capillary haemangioma of right upper eyelid which was treated by surgical excision and there was no recurrence at 1 month follow-up.

CONCLUSION

This case is being presented to highlight the occurrence of capillary haemangiomas in adults and need for its proper management. Histopathological features and clinical presentation of these lesions

Our choice of treatment proved to be very successful. The lesion was removed in its entirety and post operative cosmetic result was

Age of onset, absence of any etiology, male gender and fast progression make this a unique case.

REFERENCES

- Haik BG, Jakobiec FA, Ellsworth RM, Jones IS. Capillary hemangioma of the lids and orbit: An analysis of the clinical features and therapeutic results in 101 cases.
- Ophthalmology. 1979;86:760–92.

 Murphy BA, Dawood GS, Margo CE. Acquired capillary hemangioma of the eyelid in an adult. Am J Ophthalmol. 1997;124:403–4.
- an adunt. Am J Opinialmol. 1997;124:403–4. Brannan S, Reuser TQ, Crocker J. Acquired capillary haemangioma of the eyelid in an adult treated with cutting diathermy. Br J Ophthalmol. 2000;84:1322. Pushker N, Bajaj MS, Kashyap S, Balasubramanya R. Acquired capillary haemangioma of the eyelid during pregnancy. Clin Experiment Ophthalmol. 2003;31:368–9.
- of the eyelti during pregnancy. Clin Experiment Opiniamol. 2003;31:308–9. Garg R, Gupta N, Sharma A, Jain R, Beri S, D'souza P. Acquired capillary hemangioma of the eyelid in a child. J Pediatr Opithalmol Strabismus. 2009;46:118–9. Pujari A, Bajaj MS, Obedulla H, et al Acquired capillary hemangioma of the eyelid in a 10-year-old boy. Case Reports 2017;2017:ber-2017-221102. Vijayanand S,Ranganatha N, Singh M, Babu R. Unusual case of acquired capillary

- hemangioma of the eyelid in an adult. Ann Maxillofac Surg 2017;7:308-11. Kıvanç, Sertaç Argun; Olcaysu, Osman Okan1; Gelincik, İbrahim2. Acquired capillary hemangioma of the cyclid in a 49-year-old woman from Turkey. Indian Journal of Ophthalmology: September 2014 - Volume 62 - Issue 9 - p 969-970 doi: 10.4103/0301-4738.143955
- Shields JA, Shields CL. Vascular tumors of the eyelid. In: Shields JA, Shields CL, editors. *Eyelid, Conjunctival, and Orbital Tumors: An Atlas and Textbook.* 2nd ed. Philadelphia, PA: Lippincott Williams and Wilkins Co; 2008. pp. 131–58. Richter GT, Friedman AB. Hemangiomas and vascular malformations: Current theory
- and management. Int J Pediatr 2012.2012:645678.