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A Case Report: An Isolated Conjunctival Capillary Hemangioma Management Masquerading as Ocular Surface Squamous Neoplasia

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Abstract

The purpose of this article is to report a case of isolated subconjunctival capillary hemangioma, masquerading as ocular surface squamous neoplasia (OSSN) in a 58-year-old lady. Conjunctival hemangioma over the age of 58 is rare, with few cases reported in the literature. Here, we present an interesting case of spontaneous development of this tumor at age of 58, without associated systemic disease process or cutaneous manifestations this female presented with complaints of isolated elevated vascular nodular lesions with feeder vessels in superior-temporal bulbar portion of left eye. Provisional diagnosis of left eye was made as OSSN. Wide excisional biopsy with cryotherapy was performed for the left eye. Histopathology report of the lesion showed subconjunctival capillary hemangioma with no malignancy. The patient did not show any recurrence of lesion in the left eye at 2 month follow-up.

Keywords: Conjunctival hemangioma, ocular surface squamous neoplasia (OSSN), vascular nodular lesion, excisional biopsy, cryotherapy.

Introduction

True vascular tumors of the conjunctiva are uncommon and usually arise without pathology. Such tumors are lymphangioma, cavernous hemangioma, Kaposi sarcoma, pyogenic granuloma and capillary hemangioma.[1-6]. Vascular malformations, such as lymphangioma and arteriovenous malformations are present at birth and are characterized by very slow growth with persistence into adult life.[7,8] Capillary hemangiomas of the conjunctiva are quite rare especially in elderly patient. Generally it has been observed that the older the patient, the higher the risk of malignant tumour on the conjunctiva. Thus, such tumours must be carefully examined before removal. Here, we discuss development of a conjunctival hemangioma with rapid growth in 58-year-old patient. The purpose of this case report is to describe an isolated capillary hemangioma of conjunctiva in an elderly female as a rare entity.

Case Presentation

A 58-year-old female presented with a brown coloured 'blood filled cyst' in the supero-temporal region of left eye of one month duration. Patient denied pain, any dimunition of vision, size, or color of the lesion over this time period, any kind of eye trauma, allergy, or use of medications including anticoagulants and non-steroidal anti-inflammatory drugs (NSAIDS). The patient was aphakic since last 4 years with horizontal oval pupil left eye. Patient's chief compliant was brown mass in the white portion of eye coincidentally noticed since 3 days along with foreign body sensation and ocular itching in the left eye.

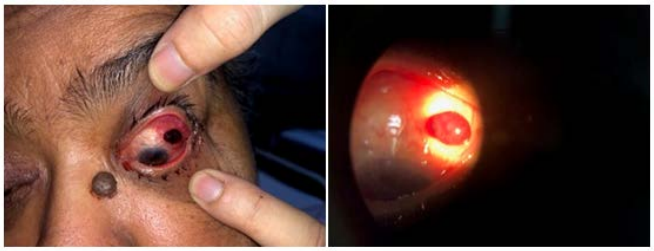

Figure 1: Conjunctival mass

On examination, best corrected visual acuity of the patient was 6/6 in both eyes. Extra ocular movements were full in both eyes. Slit lamp biomicroscopy of the left aphakic eye revealed a 6.5 x 2.5 mm, partially mobile, semi solid, pedunculated conjunctival hemorrhagic lesion (Fig.1). The lesion was dark brown in colour, had well-defined borders and was located in the supero-temporal region. There were no associated feeder vessels and pulsations. Anterior segment examination showed aphakia with oval shaped pupil. Intraocular pressure was within normal range in both eyes. Fundus examination in both eyes was normal. Ultrasonography revealed the tumour had a sharply defined margin and had no deeper invasion of the sclera. Since the incidence of malignancy is high for conjunctival neoplasms in patients over 58 years, the lesion was planned for excision biopsy (Fig.2 A&B). Excisional biopsy of the mass was done and sent for histopathological anlaysis. The patient was treated postoperatively with a course of topical antibiotic and steroids and healed well within 2 week period. Patient remained asymptomatic in subsequent follow-up at 1month and 2 months (Fig.3 A,B&C).

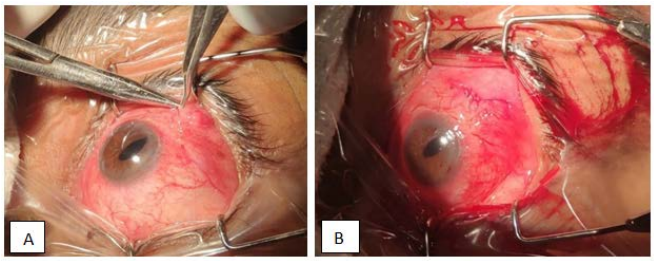

Figure 2: Excision of growth A & B

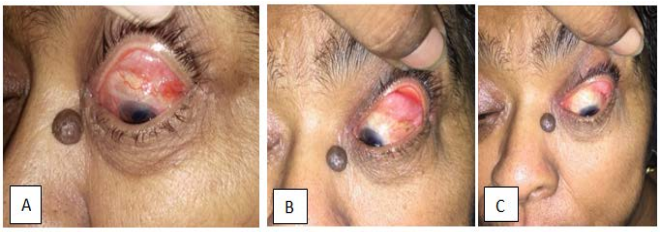

Figure 3: Post Operative follow-up

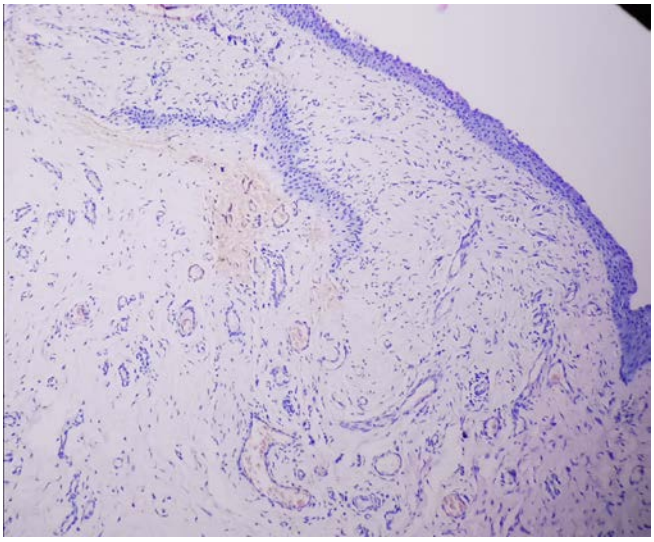

Figure 4: Conjuctival epithelium & capillary proliferation

The conjunctival biopsy showed sub epithelial proliferation of variably thin-walled vascular channels, lined by a single layer of endothelial cells; some filled with blood. Extravasated red blood cells were also identified. The final pathologic diagnosis was conjunctival capillary hemangioma (Fig 4-6). The tumour was diagnosed as a conjunctival capillary haemangioma.

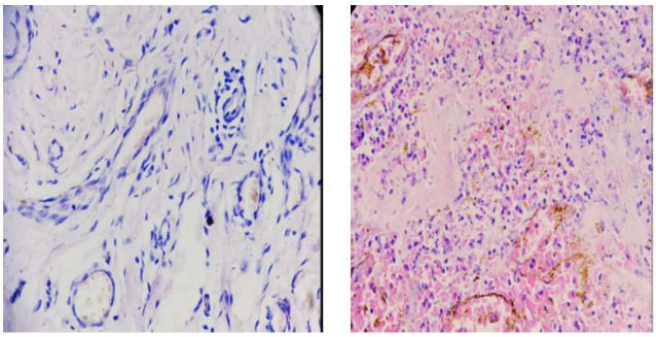

Figure 5 & 6: Capillary proliferation

Discussion

Capillary hemangiomas are asymptomatic and most common congenital vascular tumors which involute within the first decade of life. Acquired cases of capillary hemangiomas in middle-aged males are of rare occurrence.[9]Conjunctival haemangioma account for about 2% of all the conjunctival neoplasms.[10] A haemangioma is a developmental malformation of blood vessels and is an example of a haemartoma. It may be capillary, venous or arterial. Its incidence is reported as 1-2% of all benign growths of the conjunctiva.[3,6,12] Sixty per cent of conjunctival tumours in patients over 60 years are malignant.[9,13]

The conjunctival vascular tumors remain asymptomatic for a long time and exhibit a benign clinical behaviour. These tumors may be isolated or associated with other ocular capillary hemangiomas (e.g. Sturge Weber Syndrome).[1] Pathology of this lesion usually shows an intact surface epithelium with positive markers for vascular endothelium and pericyte (e.g. CD31, CD34, IA-4). [1,3]Management of these lesions decides on the basis of presumptive diagnosis, size, and extent of the lesion.

Conclusion

As with all tumors of the conjunctiva, it is important to manage each case individually and observe for unusual characteristics and growth pattern. Our case is unique from those previously published in the literature; in that our patient spontaneously developed this tumour at age 68 without any associated systemic disease process or cutaneous manifestations.

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