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# Conjunctival growth masquerading as melanoma: A case report

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## Abstract

We report a rare case of seventy year old female presenting in the Department of Ophthalmology after referral by her local doctor complaining of a brownish mass in left eye since ten months, which was gradually increasing in size. She noticed rapid increase in size over last two months. On examination a brownish mass was present over limbus covering one fourth cornea of nasal side extending on nasal sclera also. The growth could be divided into two parts, upper part darkly pigmented brown in colour and lower part was white in colour, gelatinous with irregular borders and uneven surface with feeder vessels. Provisional diagnosis of conjunctival melanoma was made on basis of clinical suspicion but on HPE it turned out to be a benign lesion.

**Keywords:** Conjunctival melanoma, Masquerading, Histopathological examination.

## Introduction

Pigmented conjunctival lesions are a diagnostic challenge for the clinician. In some case apparently indolent lesion represent diagnosis with a bad prognosis. In others, rapid growth of tumour which suggest a malignant neoplasia are infact benign lesions with good prognosis. Accordingly it is very important to be acquainted with clinical aspect and histopathological diagnosis of the different conjunctival entities which can produce dilemma in diagnosis and inadequate or over treatment.[1,2]

## Case Report

A seventy year old female presented to us in April 2016 with chief complaint of brownish mass in left eye since ten months which was gradually increasing in size and rapid growth over last two months. According to the patient it was painless. There was no history of trauma, foreign body or corneal ulcer. There was history of uneventful cataract surgery 3 years back in left eye and 2 years back in right eye. There was no other significant ocular history. On examination of left eye a pigmented growth 11mm vertically and 7mm horizontally was present on nasal limbus and covering adjacent conjunctiva and extending up to 3mm at cornea with irregular borders and uneven surface.[Fig. 1] Upper part of growth was brown in colour, extending 8 o'clock to 11 o'clock and lower part white in colour, gelatinous, uneven surface extending from 7 o'clock to 9 o'clock with prominent vessels at limbal margin and adherent to cornea and conjunctiva. Six feeder vessels were present nasally. Episcleral blood vessels were congested and tortuous in nasal side. Superficial corneal vascularization was present, surrounding cornea was hazy, anterior chamber was normal depth, iris was normal in colour and pattern, pupil was pear shaped, pseudophakic with dense posterior capsular opacification. Visual acuity on Snellen chart was 4/60, BCVA was 6/60 with +1.00S/+2.50C*100. Digitally intraocular pressure was normal. The Right eye was pseudophakic with posterior capsular opacification and examination of right eye was unremarkable.

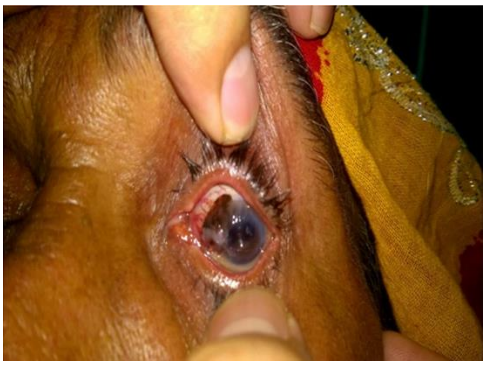

**Fig. 1: Showing a brownish mass on nasal limbus and adjacent conjunctiva**

Regional lymph nodes were not palpable. Routine blood investigations (Complete blood count, Bleeding time, Clotting time, Fasting blood sugar, Renal function test, Liver function test, Chest-X-ray, Ultrasonogram of abdomen) were within normal limits. The patient was subsequently posted for excisional biopsy and complete dissection was done with minimal handling. During dissection growth was found highly friable and sent for histopathological examination. There was minimal bleeding and the growth was excised completely obtaining clear corneal and scleral surface. Topical antimitotic therapy (MMC-0.02%) was planned after receiving confirmation for malignancy.

On first postoperative day the surface of cornea and sclera were smooth [Fig. 2]. Eye drop Tobramycin plus Dexamethasone, Carboxymethylcellulose 0.5% was given postoperatively.

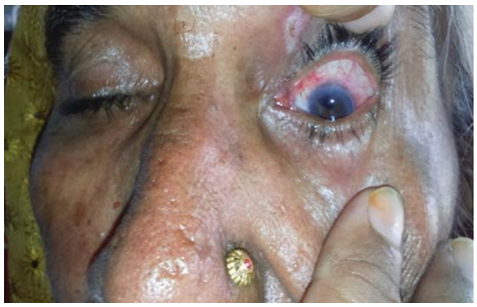

**Fig. 2: 1st post operative day- showing clear corneal and sclera surface**

But to our surprise the HPE report [Fig. 3] received on 5th day revealed "Normal stratified non-keratinized squamous epithelium with few chronic non specific inflammatory cells. No Evidence of Malignancy". Because of strong clinical suspicion of malignancy the HPE blocks sent for second opinion which was same as the first one and patient was followed up weekly for one month then every month for six month.[Fig. 4, 5]

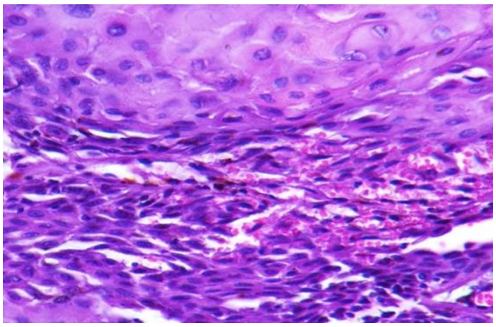

**Fig. 3: HPE section shows normal stratified, non-keratinized squamous epithelium with few chronic non-specific inflammatory cells**

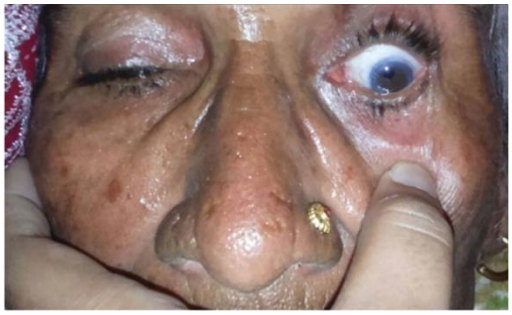

**Fig. 4: Post-operative 7th day-showing clear corneal and sclera surface**

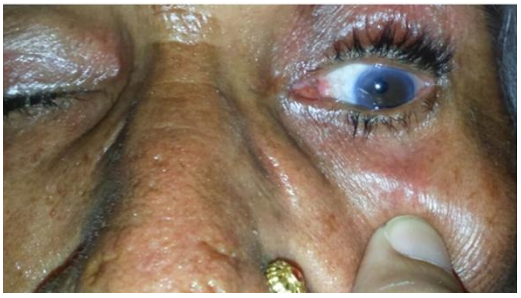

**Fig. 5: Post-operative- at 30th day shows clear corneal and sclera surface**

## Discussion

Conjunctival melanoma is a rare tumor of middle and old age. It is seen predominantly in whites.[3] It accounts less than 2% of ocular melanomas and fewer than 1% of malignant tumours of eye.[4] Conjunctival melanoma is a pigmented tumor arising in the limbal, bulbar, forniceal or palpabral conjunctiva. Lesion shows some thickness and nodularity and presence of dilated feeder vessels.[5] There can be associated region of primary acquired melanosis. It may extend to cornea also.[5] On histopathology it shows abnormal melanocyte which may shows abnormal melanocyte which may be pleomorphic, large polygonal cells, or spindle cells. The cells are present in the basal epithelium as well as invading the substantia propria.

This case highlights that benign pigmented growth on limbus as well as juxtalimbus with uneven surface and irregular borders with corneal extension and presence of dilated feeder vessels may masquerade as conjunctival melanoma and may even change the plan of action. The treating ophthalmologist must therefore confirm the HPE diagnosis in all cases before planning for any aggressive management. This was a rare case report of benign pigmented conjunctival tumor presenting as malignancy and has not be reported in literature so far to the best of our knowledge. A thorough search was made on Pubmed and Medline for similar case report but none were obtained. Hence we decided to report the case.

## Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In form patient has given consent for her images and other clinical information to be reported in the journal. The patient understand that her name and initials will not be published and due efforts will be made to conceal the identity, but anonymity cannot be guaranteed.

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Nil.

## Conflicts of interest

There are no conflicts of interest

## Acknowledgement

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