CASE REPORT

Squamous Papilloma over Lid Margin: An Uncommon Presentation

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ABSTRACT

Papilloma is a histopathological term describing tumors of a classical finger-like or cauliflower morphology. Though benign, they carry profound malignancy potential and can present at numerous anatomical locations, such as skin, cervix, esophagus, respiratory tract, breast duct, etc. Papillomas over conjunctiva are not frequently encountered and carry special significance.

A 60-year-old diabetic female presented with a left upper lid marginal sessile mass of 9 months duration with mild epiphora and foreign body sensation. On examination, a solitary, fleshy, sessile, polypoidal mass measuring 1 × 1 cm was seen, with irregular cauliflower-like surface present over lateral aspect of left upper lid, firm in consistency with raised edges. Visual acuity in right eye was 6/18 → 6/9 and left eye 6/36 → 6/9, intraocular pressure (IOP) was 14.6 mm Hg in both eyes by Schiötz tonometry. Complete excision of the lesion employing microsurgical technique with close apposition of lid margin using 6-0 Vicryl sutures was done under local anesthesia (LA). Histopathological examination revealed stratified squamous epithelium forming papillae with variable goblet cells supported by prominent branching fibrovascular cores in the center. A satisfactory functional and cosmetic result was achieved. Follow-up of 6 months did not reveal any recurrence. A satisfactory functional and cosmetic result achieved.

Squamous papillomas over lid margin are uncommon presentations. Even though benign they carry morbidity potential in the form of chronic epiphora, corneal erosions, and lid deformities if inadequately managed.

Keywords: Conjunctival papilloma, Histopathological examination, Human papilloma virus, Squamous papilloma.


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INTRODUCTION

Papilloma is a histopathological term describing tumors of a classical finger-like or cauliflower morphology. Even though benign they carry profound malignancy potential and can present at numerous anatomical locations, such as skin, cervix, esophagus, respiratory tract, breast duct, etc. Commonly referred as warts or genital warts when present over skin or genitals, the papillomas can be pedunculated or sessile. They are ascribed an infectious etiology with a strong association with human papilloma virus (HPV).

Papillomas over conjunctiva are not frequently encountered but they carry special morbidity significance. Conjunctival papillomas are categorized as infectious (viral), squamous cell, limbal, inverted types, based on appearance, location, patients age, propensity to recur after excision, and histopathologically.1 They usually demonstrate an exophytic growth pattern. Interestingly, inverted papillomas exhibit both exophytic and endophytic growth patterns. Of the reported papillomas, prevalence of conjunctival papillomas ranged from 4 to 12%. Recurrence rate varies from 6 to 27%.2

Bulk of conjunctival papillomas >60% present over the exposed part of conjunctiva and caruncle usually occur close to the medial canthus.3 Squamous cell papillomas are seen in children and young adults, while the limbal sessile variant occurs in elderly and has etiological association with ultraviolet (UV) radiation. Polymerase chain reaction studies have highlighted the association between HPV type and site and cell specificity for papilloma; e.g., HPV 6 & 11 for skin and genital warts, HPV 6a & 45 for conjunctival papilloma.4 Infectious role of HPV explains the multiple sites or crop-like involvement of papillomas.5 Key interest is the life-threatening condition of respiratory distress in children due to respiratory papilloma associated with a benign conjunctival papilloma.

CASE REPORT

A 60-year-old diabetic female presented with a left upper lid marginal sessile mass of 9 months duration (Figs 1 and 2). No h/o trauma, surgical intervention, discharge was present. Mild epiphora and foreign body sensation was reported by the patient. On local examination, a solitary, fleshy, sessile, polypoidal mass measuring 1 × 1 cm with irregular cauliflower-like surface present over lateral aspect of left upper lid, firm in consistency with raised edges was seen. No apparent lid deformity or no tear film disturbances was present. Rest anterior and
posterior segments were within the normal limits. Visual acuity in right eye was 6/18→6/9 and left eye 6/36→6/9, intraocular pressure (IOP) was 14.6 mm Hg in both eyes measured by Schiötz tonometry. Regional lymph nodes were not enlarged. Nothing was significant on general and systemic examination. Routine investigations were done. Erythrocyte sedimentation rate was found to be mildly raised (10 mm in 1st hour). Viral markers were negative.

Chalazion clamp was used to isolate the lesion and provide necessary hemostasis. Complete excision of the lesion employing microsurgical technique with close apposition of lid margin using 6-0 Vicryl sutures was done under LA. Ocular patch applied for 24 hours along with conservative treatment. A satisfactory cosmetic result was achieved the very next postoperative day (Fig. 3). Mild symptoms of epiphora and foreign body sensation continued for a week, probably due to irritation by suture knots. No lid ecchymosis or edema was seen. Follow-up of 6 months did not reveal any recurrence. Excised mass was sent for histopathological examination. Biopsy reports revealed stratified squamous epithelium forming papillae with variable goblet cells supported by prominent branching fibrovascular cores in the center. Basement membrane was intact. Evidence of invasion by neoplastic cells was not seen (Fig. 4).

**DISCUSSION**

Even though a benign occurrence, conjunctival papillomas do attract attention due to cosmetic and local irritant features along with malignancy potential. Majority of cases are reported in 4th decade. Case reports in children are associated with infectious mode through vaginal delivery and are generally multiple with ready recurrence. Largest case series of 91 conjunctival papillomas has been reported from Denmark with a mean tumor diameter of 8 mm and thickness of 3 mm. Medial tear flow direction and medial rubbing of eyes has been implicated as the reason for higher prevalence around medial canthus.
Lid marginal tumors arouse special interest for various reasons, which are: Large series of differential diagnosis, malignant potential especially in elderly age group, tear film dysfunction in addition to cosmetic blemish, surgical challenges in view of proper apposition requirements to ensure adequate tear meniscus, lid functioning and high rate of deformities in form of lid notching, entropion, or ectropion. Corneal and ocular surface disorder may be an added discomfiture. Of key interest in different benign conditions over lid margin are granuloma associated with hordeolum, keratoacanthoma, inverted follicular, seborrheic keratosis, amelanotic nevus, molluscum contagiosum and of alarming nature are squamous cell carcinoma and sebaceous gland carcinoma. Surgical options for lid marginal tumors include: Simple excision, excision with conjunctival/mucous membrane graft, cryotherapy, photodynamic therapy, laser, combination with drugs like interferon 2-alpha and cimetidine.

CONCLUSION
Delay in seeking medical attention is a routine feature for conjunctival papillomas due to a benign course with scant symptoms. Misdiagnosis is common, due to rare occurrence of conjunctival papillomas over lid margin (<4%). Literature although replete, for other papillomas, is lacking for conjunctival papillomas.

All conjunctival lesions no matter how innocuous by appearance must be subjected to histological examination for ascertaining the nature and also early detection of malignancy.

REFERENCES
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