

A Rare Case of Upper Eyelid Cutaneous Horn

Neeraj Sharma, Rupali Kashyap, Priyanka Kumar, Sonakshi Sehrawat, Soumya Sharma

Department of Ophthalmology, Department, Shree Guru Gobind Singh Tricentenary, (S.G.T) University, Buddhera, Gurugram, Haryana, India.

Abstract

Cutaneous horn is a conical shaped overhanging growth from the skin composed of keratinized material. We are presenting a case report on cutaneous horn of upper eyelid in a middle-age man, which developed within a year of onset from a focal swelling and turned out to be benign lesion on biopsy after its excision. Clinical diagnosis of these types of tumours is easy but their malignant potential can only be assessed by a histopathological examination, that determines the further course of treatment.

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Introduction

Cutaneous horn (cornu cutaneum) is keratinized epidermal growth. Cutaneous horn is relatively rare tumour, the precursor lesions are multiple and variable.¹ Usually sun exposed area of skin is involved in this tumour.² History of these cutaneous horns reported in various articles reveal that they look like animal horn so have always been point of interest to the clinicians. Excision and biopsy play a key role in management of such tumours. Base pathology of such tumours is the hidden iceberg and all we see clinically is just the tip of it.³

Case Report

A 45-year-old male patient, working as a clerk in a private firm, presented in ophthalmology department with primary complaint of a solitary firm conical shape protrusion from the right upper eyelid. Patient noticed a focal swelling of the right upper eyelid which gradually increased to its present size in one year.

There was no history of redness, pain, discharge, excoriation of skin and ulceration. Family and personal history for ocular and systemic diseases was not significant.

A detailed clinical examination demonstrated a cone shaped growth measuring length of 1cm & base of 0.5cm over the outer 1/3rd of the right upper eyelid (Figure 1 and 2). The growth was firm in consistency, non-tender, without any discharge or bleeding.

Regional lymph node examination was normal. A clinical diagnosis of cutaneous horn was made. The

swelling was excised under local anaesthesia and defect was left to heal by secondary intention. (Figure 3). Excised Specimen was sent for histopathological examination.



Figure 2: pre operative slit lamp photograph of cutaneous horn of upper eyelid



Figure 1: pre operative photograph of cutaneous horn of upper eyelid



Figure 3: intraoperative photograph of excised cutaneous horn

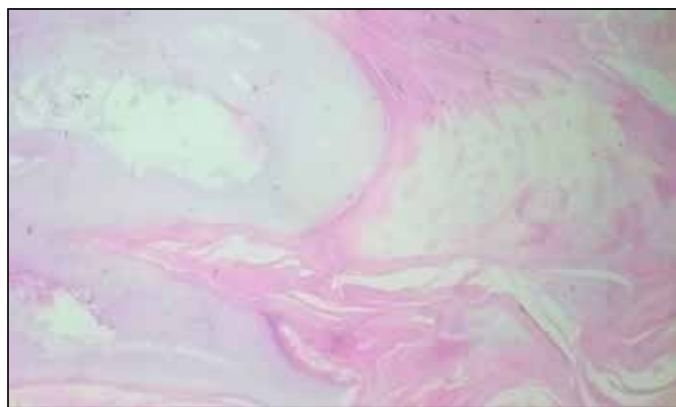


Figure 4: Histopathological photograph showing hyperkeratosis, hyperplastic stratified squamous epithelium without invasion of underlying tissue

Gross examination of specimen revealed a grey brown conical tissue measuring 1.0 cm in length and a base of 0.5 cm.

On microscopic examination hyperkeratotic, hyperplastic stratified squamous epithelium seen. All these features were suggestive of cutaneous horn with no underlying tissue invasion (Figure 4).

On follow-up, the patient had an uneventful course and the site of wound was healthy and healing.

Discussion

The cutaneous horn alludes to a tumour located on the epidermis with a hyperkeratotic conical shape, white-yellowish in colour ranging from few millimetres to a few centimetres in size.⁴ In the true cutaneous horn, the height is at least one-half the width of the base.⁵ Cutaneous horn arises due to abnormality in the spinous layer of the epidermis that leads to excessive accumulation of keratin and there is an unusual cohesion of keratinized material which is accumulated either superficially or deep in cutis forming a mass of keratin.⁶ UV ray exposure triggers the condition, as evident in the higher number of cases reported on face, pinna, nose, dorsal forearms, and scalp. It can involve chest and penis. Cutaneous horn is usually seen in males above sixty years of age.⁷

It accounts for 4% of all eyelid tumours. The composition of these lesions is the same as that of keratotic material which resembles an animal horn and there is no bony core.

The most common types of lesions that can be identified histopathologically at the base of the cutaneous horn include: actinic keratosis, keratoacanthoma, seborrheic keratosis, pyogenic granuloma, discoid lupus erythematosus, verruca vulgaris, epidermal nevus, trichilemmal cyst, trichilemmoma, prurigo nodules, intradermal nevi, Bowen's disease, basal cell carcinoma and squamous cell carcinoma.⁸⁻¹²

Complete surgical excision of horn is the method of choice and histopathological examination plays a vital role in further treatment and follow up. It identifies the base lesion and its malignant potential. In 1991, A study of 643 cutaneous

horns by Yu et al reported that 39% of cutaneous horns were derived from malignant or premalignant epidermal lesions and 61% from benign lesions. The relative risk of a malignant base pathology in a cutaneous horn on the eyelids is 2:1, more than that on other part of the body.¹³

Other treatment options include electrocautery, cryotherapy, carbon dioxide or Nd-YAG laser in patients not willing for excision. Drawback of these methods is that no histopathologic evaluation could be done which is required for assessing the malignant potential of the base lesion.^{14,15}

Conclusion

Cutaneous horns are a rare lesion, which can be diagnosed clinically as a cone shaped overhanging growth above the surface of the skin. Histopathological examination of these lesions, especially the base of horn is mandatory to rule out malignant changes. So, it is recommended that in every patient with cutaneous horn, the diagnosis of the cardinal lesion should be done by appropriate biopsy and histopathological examination.

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Address for correspondence

Neeraj Sharma

Professor Ophthalmology

Department of Ophthalmology,

SGT University Gurugram,

Haryana, India

E-mail: sharmaneeraj75@rediffmail.com



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