

Cutaneous Horn of Eye Lid: A Rare Case Report

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Abstract: A cutaneous horn is a relatively rare tumour, most often arising from sun exposed skin in elderly men, usually after fifth decade. The tumour is often conical, consisting of marked retention of stratum corneum. Cutaneous horn occurs in association with or as a response to a wide variety of underlying benign, premalignant and malignant cutaneous diseases. A 52 years old patient coming with the chief complaint of painless growth over the upper lid margin of right eye for last 1 year, which was progressive in nature. Anterior segment was normal. A complete resection was primarily performed. Histopathological study disclosed thickening & hyperkeratosis stratum corneum with parallel layers of keratin suggestive of benign lesion.

Keywords: Cutaneous horn, Cornucutaneum, Actinic keratosis, Eyelid mass.

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I. Introduction

A cutaneous horn (cornucutaneum) can be defined as a protuberant mass of keratin resembling the horn of an animal that results from unusual cohesiveness of keratinized material from the superficial layers of skin or implanted deeply in cutis[1]. It is a well circumscribed, conical and hyperkeratotic lesion, which can be benign or malignant lesions. The diagnosis of this condition is done by its clinical appearance, the lesion being classified as solitary or multiple, most often located at the level of the skin on the patient's face[2]. It is believed that UV radiations trigger this condition. Usually, it affects people over the age of 50, in both genders. The cutaneous horn can involve in any part of the body: the malar or frontal areas, dorsum of nose, neck, lips, upper eyelids lower eyelid, external ear, scalp, upper limbs, chest, lower limbs and penis. The treatment of choice is the surgical excision with direct closure of the lesion followed by a histopathological examination. The cutaneous horn can develop on benign (seborrheic keratosis, viral warts, histiocytoma, inverted follicular keratosis, verrucous epidermal nevus, molluscum contagiosum, etc), premalignant (solar keratosis, arsenical keratosis, Bowen's disease) or malignant lesions (squamous cell carcinoma, rarely, basal cell carcinoma, renal metastatic carcinoma, granular cell tumor, sebaceous carcinoma or Kaposi's sarcoma). Among all the lesions 30% of the lesions are observed in head and neck regions[3,4].

II. Case Report

A 52 yrs old male patient reported to the Out patient department of Ophthalmology department, Agartala Govt. Medical College, Agartala, Tripura with the chief complaint of painless growth over the upper lid margin of right eye. History revealed that patient was apparently alright 1 yrs back, then he first noticed a small growth over right upper lid. The growth was painless and slowly progressive, obstructing the vision. Not associated with any fever or itching. The patient appeared to be normal, healthy and had no medical history. Physical examination revealed a solitary, firm, horn like projection 1.5 cm in height with a hyperkeratotic surface without lymphadenopathy. Skin surrounding the lesion was normal. No ulcerative lesions were found. No tenderness was present. Routine blood, urine, stool screening tests were non significant. There was no history of prior cutaneous lesion or weight loss or any other signs of systemic illness.

A excision of complete mass with local anesthesia was done and the defect was closed and sutured with Vicryl 6-0 sutures. The resected specimen was evaluated microscopically which revealed layers of epithelial cells along with sebaceous cyst, areas of hyperkeratosis, parakeratosis of the surface epithelium. There was no recurrence on six months follow up and there was no complications also.

III. Figures



Figure 1: cutaneous horn on the lateral aspect of the upper eye lid.



Figure2: Excision of the horn and closure of the wound by 6-0 vicryl suture.



Figure3: Excised specimen of cutaneous horn.

III. Discussion

The cutaneous horn refers to a tumor located on the surface of the skin with a hyperkeratotic cone shape, white-yellowish in colour ranging from few millimeters to a few centimeters in size^[5]. It is a relatively rare tumor. It accounts for 4% of all eyelid tumors. These lesions consist of keratotic material resembling that of an animal horn, it has no bony core^[6]. The age of onset of the cutaneous horn is between 60-70 years old. The earliest well-documented case of cornucutaneum is of Mrs. Margaret Gryffith, an elderly Welsh woman reported from London in 1588. A showman, who advertised it in a pamphlet, exhibited her for money. However, earliest observations of cutaneous horns in humans were described by British surgeon Everard Home in 1791. Farris from Italy first described the gigantic horn in man as well as documented a case report with adequate histology.^[7] The cutaneous horn is made of keratin. The basis can be flat, nodular or crater-like. It is difficult to differentiate a benign or a malignant lesion clinically, but the induration and bleeding at the base of a large tumor goes in favour of malignancy. The cutaneous horn develops most often on sun-exposed skin, on a preexisting lesion, such as benign warts or seborrheic keratosis. ^[8] 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 ^[9] Mencía-Gutiérrez et al. (2004) conducted a study with 48 cases cutaneous horns of the eyelid among them 77.1% of them were associated with benign lesions, 14.6% with premalignant lesions, and 8.3% with malignant lesions. ^[10]

IV. Conclusion

Cutaneous horns of eyelid are a relatively rare entity, which can be diagnosed clinically as a conical projection above the surface of the skin. The significance of these lesions is the underlying condition, which may be benign or malignant. Therefore, in each patient with cutaneous horn, underlying lesion should be diagnosed by appropriate biopsy and histopathological examination.

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