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Cutaneous Horn On The Right Supraclavicular Region In an Adolescent Female, a Rare Case Report

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Abstract

Cutaneous horn (CH) is an outgrowth from the skin surface, composed of keratin, and associated with benign to malignant skin lesions. We report a case of CH in a 15-year-old female associated with Keratoacanthoma. It is uncommon in young people and is associated with a good prognosis because of its benign nature. This case needs to be reported as it highlights the rare occurrence of this condition in the younger age group and its good prognosis. Surgical excision is the treatment of choice, with histopathologic diagnosis playing a critical role in determining the nature and further treatment of this condition if required.

Key words: Adolescent, Case report, Cutaneous horn, Keratoacanthoma.

Introduction

Cutaneous horn (CH) is an uncommon skin lesion that grossly presents as an elongated structure consisting of dead keratin and projects above the skin surface with resemblance to animal horn. [1,4]
It commonly involves the head and neck region in patients 50 years or older, and its occurrence in adolescent age is rare. It is associated with a benign, premalignant, and malignant condition of the skin.[3] Various risk factors have been described in literature like chronic sun exposure, solar keratosis, malignant skin lesion.[4]
Delayed presentation is common, and cosmesis is the reason for seeking treatment despite its association with malignancy. Considering the rarity of this entity in the adolescent age group, we report a case of CH in an adolescent female treated with surgical excision. This case report is in line with SCARE criteria.[2]

Case illustration

A 15-year-old adolescent female presented at our outpatient department with a hard horn-like lesion over her right supraclavicular region for the past three years. The lesion was slow-growing and painless. It was on the exposed body part, therefore, disfiguring in appearance. The patient did self-mutilation of this lesion because of cosmetic reasons. Regrowth of the lesion was the cause for seeking treatment (Fig.1). There was no family history of malignant skin lesions.

Local examination revealed a hard yellow-brown colored horn-like structure over the right supraclavicular region with no regional lymphadenopathy. The laboratory results were within the normal range. The lesion was excised with a rim of normal skin using local anesthetic infiltration. The wound closed primarily. Histopathological findings of the excised specimen with Hematoxylin & Eosin stain revealed a lesion with crateriform architecture, exophytic and endophytic components, and a well-defined collarette. The central crater was filled with keratin. The epithelium showed well-differentiated squamous cells with eosinophilic glassy cytoplasm (Fig.2). The base of the lesion was free. The patient is in good health without recurrence at six years of follow-up.

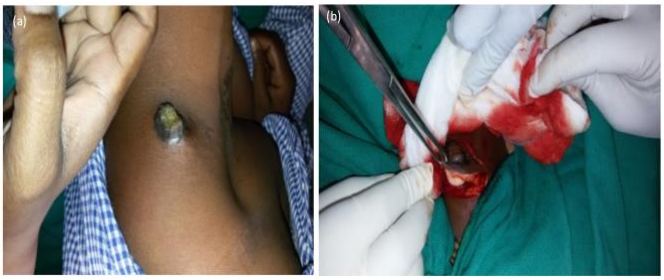

Figure 1. a) Cutaneous horn on the right neck, (b) Intraoperative image showing chalky white material in the lesion base

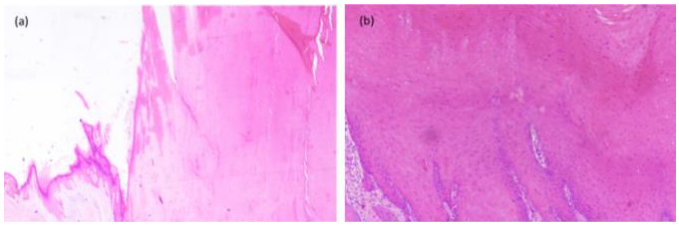

Figure 2- Hematoxylin and Eosin stained images show keratinized and well-differentiated squamous cells.

Discussion

Cutaneous horns are commonly reported in the older age group in fair skin people. Only 1.8% of patients were in the age group of 10-29 years,[3] but the actual prevalence of this condition has not been reported.[1] Chronic sun exposure may lead to the development of CH at a younger

age. Delay in seeking treatment has been reported. It is more common in females and associated with benign, premalignant, and malignant skin lesions.[3] Regarding gender prevalence, other literature reports male predominance.[4,5] Similarly, benign, premalignant, or malignant conditions associated with CH are 41% and 58% in one series[3] while 61% and 39% in another.[5] Among benign lesions, viral wart, Keratoacanthoma, and seborrheic keratosis are commonly associated with CH. Actinic keratoses, and squamous cell carcinoma reported premalignant and malignant conditions, respectively. Premalignant lesions are frequently found in the head and neck region.[3] In our case, the lesion was in the sun-exposed right supraclavicular region and was associated with Keratoacanthoma at its base. The risk factors for the malignant or premalignant condition are age at presentation, male gender, lesion on the sun-exposed area, and more extensive base or low height-to-base ratio.[5] The index case did not have all these risk factors except its location in a sun-exposed area. This lesion is associated with premalignant and malignant conditions. Hence excision of these lesions with a negative margin at its base must be ensured, especially when risk factors favor malignant conditions.

In our case, histopathology showed a crateriform lesion with exophytic and endophytic components and well-defined collarette. The central crater was filled with keratin, and epithelium showed well-differentiated squamous cells with eosinophilic glassy cytoplasm. These findings were suggestive of cutaneous horn with underlying Keratoacanthoma.

Conclusion

Cutaneous horn must be viewed with suspicion given its association with the premalignant and malignant cutaneous condition; histopathologic examination with particular attention to the base of the excised lesion must be done to rule out malignancy. Treatment of such lesion must be surgical excision with a negative margin

Disclosure

Authors declare no conflict of interest

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