

# Giant Cutaneous Horn: A Rare Case Report and Review of Literature

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**Abstract:** Giant Cutaneous horns are very rare and are often associated with superstitious awe as it resembles an animal horn. It is a keratotic mass arising from the cutis of sun exposed areas. They are asymptomatic but may present with itch, pain and oozing at the base or around the lesion. Aetiology is unknown but occurs in association with, or as a response to a wide variety of underlying benign, pre-malignant, and malignant Cutaneous disease. These horns have a high incidence of malignancy at the base and therefore require immediate clinical attention. Excision with histopathology is the initial treatment. The final pathologic diagnosis determines definitive therapy.

**Keywords:** Giant horn, cutaneous horn, Seborrheic keratosis

## 1. Introduction

Cutaneous horns are rare and no incidence or prevalence has been reported in the literature yet [1]. A sizeable number of people with cutaneous horns have been reported in the medical literature, almost entirely among Caucasians from Europe, with a few additional reports emanating from Turkey. The rarity of this condition in other races and regions is evidenced from the occasional reports from India (Asia) and Sudan (Africa) [2]. Cutaneous horn or cornu cutaneum is a keratotic mass arising from the cutis. These are usually asymptomatic, slow growing, of variable size and resemble a miniature horn. Cutaneous horns can occur anywhere on the body, but are more common on sun-exposed areas especially head, face, pinna, nose, forearms and dorsum of hands [3]. Various underlying dermatoses are associated with cutaneous horn but the predisposing factors that lead to the formation of a horn in these dermatoses are not known. 61.1% of cutaneous horns have benign base where as 38.9% have premalignant and malignant base pathology [4, 5]. Because of the risk of presence of an underlying malignant condition, deep biopsies or total excision of small lesions are recommended. Although a giant Cutaneous is more common with malignant pathology, a few cases have previously been reported with benign Cutaneous pathologies such as verrucae vulgaris [6], xeroderma pigmentosa [7], burn scar [2], naevus sebaceous [8], and only once reported in Seborrheic keratosis [9]. This paper reports a case of a giant cutaneous horn on the face, which was associated with Seborrheic keratosis.

## 2. Case Report

A 7 year old man presented with a giant "horn-like" mass on the face, just left lateral to his nose, projecting upwards and outwards. The lesion had started growing as a small nodule 20 years back and gradually enlarged to form a horny mass. The patient never reported to hospital for the fear of removal because of his superstitious/ religious belief. Only when the horn became problematic by obstructing his field of vision, he reported to us. There was a history of occasional pain and itching around the base of lesion. There was no history of similar lesion anywhere else on body. On examination, there was a single, brownish black, slightly curved, woody-hard

hyperkeratotic growth of size 6×3.5cm long, arising on the left side of the face, in-between the nose and left infra-orbital region (Figure 1). There was no regional lymphadenopathy. A clinical diagnosis of cutaneous horn was made. Wide local excision of the swelling was done. Histopathology of the specimen was consistent with the diagnosis of Seborrheic keratosis. No evidence of malignancy was seen (Figure 2). Follow-up period was uneventful for the last 2 years.



Figure 1: Cutaneous horn

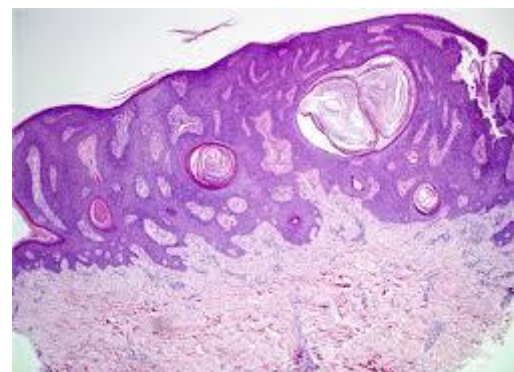


Figure 2: Histopathology showing Seborrheic keratosis features.

## 3. Discussion

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The first case of a cutaneous horn was reported in 1588 in a young woman residing in England [1]. In older times, these rare "horned people" were often treated with superstitious awe and they were put in travelling circus displays and exhibited for money [2].

Cutaneous horns are rare skin lesions caused by overgrowth of the most superficial layer of skin [3]. Patients usually present with an irregular, projected mass that has enlarged over years to decades. They are mainly composed of keratin and resemble the horn of an animal but without the central bone [1].

Cutaneous horns are more common in older patients, with the peak incidence in those between 60 and 70, with no sexual predilection, although there is a higher risk of the lesion being malignant in men. The Cutaneous horns are more common in people with fairer skin, but one case was also reported involving a black African [2]. They mostly appear on sun-exposed areas but can also occur on the chest, shoulder, leg and penis [1-4]. Mencia - Gutierrez et al. presented 48 patients in Spain with eyelid cutaneous horns over a period of 10 years [10].

Mostly, the cutaneous horns are solitary, with variable shape, size and colour. They generally present as curved, hard, yellow-brown horns surrounded by normal skin or having a border of thickened skin, as in this case. A Cutaneous horn can be cylindrical, conical, pointed, corrugated transversely and longitudinally, or curved and the base may be flat, nodular, or crateriform [3].

Cutaneous horns in humans do not grow more than 1cm in height as these lack a bony skeleton characteristic of animal horns. Giant human horns are large Cutaneous horns that can achieve enormous sizes, the largest described is a 76 year old Parsian woman named Madame Damanche in the 19<sup>th</sup> century, who grew a 25cm horn from her forehead [11]. Because of their excessive height they can be traumatized, resulting in inflammation at the base with resulting pain and itching.

Pathogenesis of horn formation in humans has not fully elucidated, but it has been suggested to be because of abnormal accumulation, excessive adhesiveness, and compaction of keratin. Various underlying dermatoses associated with Cutaneous horn include Seborrheic keratosis, wart, epidermal naevus, molluscum contagiosum, rhinosporidiosis, psoriasis, lichen planus, porokeratosis, histiocytoma, burn scars, human papilloma virus-2 subtype Cutaneous infection and pre-malignant and malignant skin conditions like actinic keratosis, keratoacanthoma, basal cell carcinoma, squamous cell carcinoma, and so forth. However, the predisposing factors that lead to the formation of a horn in these dermatoses is not known. In a large study by Yu et al, out of 643 cases of cutaneous horn studied, 61.1% had benign base pathology whereas 38.9% had pre-malignant or frankly malignant base pathology. Risk factors for underlying malignancy include advanced age, male sex, wide base or a low height-to-base ratio, and presence on a sun-exposed location [5].

Cutaneous horns have been reported very rarely in association with soft-tissue neoplasms, metastatic renal cell carcinoma, lymphoma, dermatofibroma, and pyogenic granuloma [12].

Approximately a century ago, these lesions were historically treated using simple detachment and cauterization of the base [1]. Eventually, this evolved to standard therapy involving excisional biopsy, which facilitates a tissue diagnosis of the lesion. The final pathologic diagnosis of the base dictates further definitive treatment [2-4]. If the lesion is benign, only close follow-up is required, but if the lesion is pre-malignant or malignant, wide local excision is the standard of care.

#### 4. Conclusion

The important issue in cutaneous horn is not the horn itself, which is just dead keratin, but rather the nature of the underlying disease as 38.9% has pre-malignant and malignant base pathology.

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