



## A RARE CASE OF CUTANEOUS HORN OF SCALP WITH SQUAMOUS CELL CARCINOMA IN AN ELDERLY MALE: A CASE REPORT

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### ABSTRACT

Cutaneous horn (*cornu cutaneum*) is a dense, hyperkeratotic conical protrusion having similarities to that of an animal horn. These can be associated with wide variety of underlying benign pre-malignant and malignant lesions. One of them is squamous cell carcinoma. A 60 yr old male presented with a cutaneous horn from left high parietal region of scalp since 10yrs. The lesion was excised in toto and scalp defect is approximated and allowed to heal by secondary intention. Histopathology showed stratified squamous epithelium arranged in sheets and pleomorphic with hyperchromatic nuclei, keratin pearls and large amount of keratin present suggestive of keratinizing well differentiated squamous cell carcinoma. Conclusion: Early diagnosis and management of cutaneous horn can solve both social stigmatisation and an underlying premalignant or malignant condition. Surgical excision remains the treatment of choice.

### INTRODUCTION

Cutaneous horn (*cornu cutaneum*) is a dense, hyperkeratotic conical protrusion having similarities to that of an animal horn [1]. The difference with animal horn is that it doesn't have central bone [2]. Despite numerous description of cutaneous horn since circa 1300 A.D., these remained a curious entity [3]. The earliest documented case of cutaneous horn was that of an elderly Welsh woman in London whose picture is commercially displayed as an anomaly of nature in 1588 [4, 5]. Cutaneous horns occur in any part of the body, and only 30% occur in the face and scalp [6]. Cutaneous horns develop from wide variety of benign (61.1%), pre-malignant (23.2%) and malignant (15.7%) lesion of this squamous cell carcinoma is one of them. We like to present a 60 yr old male with a cutaneous horn from left high parietal region of scalp in midline since 10yrs.

### CASE PRESENTATION

A 60 yr old male presented to Vims Bellary neurosurgery department with a cutaneous horn from left high parietal region of scalp since 10yrs. It initially started as small mass which gradually progressed into a horn. On examination, he had a 7cm x 6cm x 8cm(ht) cone shaped with broad base horn present in left high parietal region of scalp (Figure 1 and 2). The lesion was excised in toto and scalp defect is approximated and allowed to heal by secondary intention (Figure 3 and 4). Histology cut sections show cavity filled with pultaceous material, horn and areas of hemorrhage. Multiple sections studied shows stratified squamous epithelium arranged in sheets and are pleomorphic with hyperchromatic nuclei, keratin pearls and large amount of keratin present suggestive of keratinizing well differentiated squamous cell carcinoma (Figure 5).



**Figure 1. Showing anterior view of cutaneous horn**



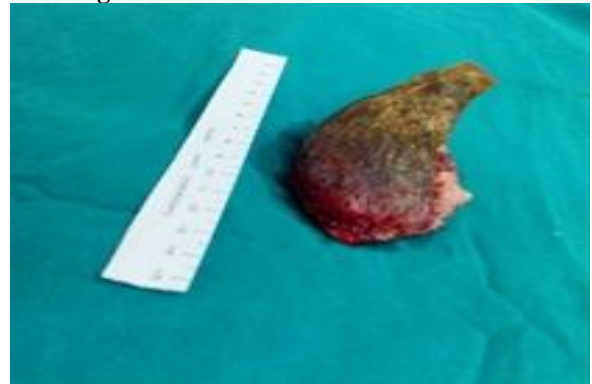
**Figure 2. Showing lateral view of cutaneous horn**



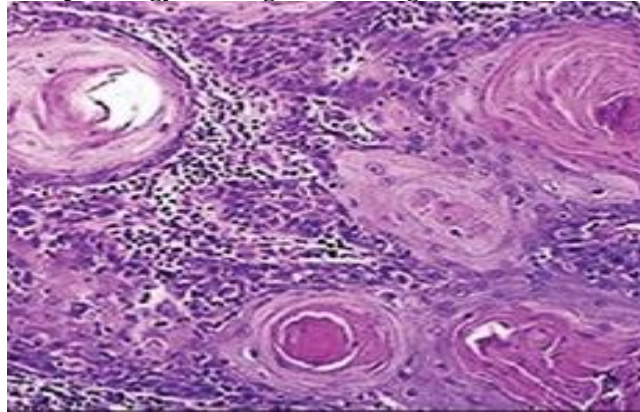
**Figure 3. Lesion after excision front view**



**Figure 4. Lesion after excision side view**



**Figure 5. Histopathology showing keratinizing well differentiated carcinoma**



## DISCUSSION

Cutaneous horns are rare; no incidence or prevalence has been reported. Cutaneous horns are most common in Caucasian patients and relatively less known in Asian, and rare in people of African descent. This racial tendency can be related to the relative protection from ultraviolet rays due to presence of pigmented skin [7]. Risk factors for the occurrence of cutaneous SCC of the head and neck include Caucasian background, male gender, age greater than 65 years, cumulative sun exposure and immunodeficiency [8]. The important point to be noted is, it's not the horn itself which is dead keratin, but rather the underlying condition, which may be benign (seborrheic

keratosis, viral warts, histiocytoma, inverted follicular keratosis, verrucous epidermal nevus, molluscum contagiosum), premalignant (solar keratosis, arsenical keratosis, Bowen's disease) or malignant (squamous cell carcinoma, rarely, basal cell carcinoma, metastatic renal carcinoma, granular cell tumor, sebaceous carcinoma or Kaposi's sarcoma). Largest study of 643 cutaneous horns was reported by Yu et al. According to them 39% of cutaneous horns were arising from malignant or premalignant epidermal lesions, and 61% from benign lesions. Histopathological examination is must to rule out underlying carcinoma so surgical excision remains the treatment of choice [9].

## CONCLUSION

The cutaneous horn implies both medical interest and social implications for the patient. Its early diagnosis

and management can solve both social stigma and an underlying premalignant or malignant condition. Surgical excision remains the treatment of choice.

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