

Cutaneous horn over an old burn scar at external occipital protuberance

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Introduction

Cutaneous horn is a conical, dense hyperkeratotic protrusion composed of compact keratin that projects above the surface of the skin. Cutaneous horns most frequently occur in sun-exposed parts and are typically found on the face and scalp, but may arise from any part of the body. They are thought to result from underlying benign, premalignant or malignant pathology, in 61.1%, 23.2% and 15.7% of cases respectively [1].

Histopathology, especially of the base of the lesion, is necessary to rule out associated malignancy [2].

Case Report

A 67 year old male admitted with a painless horny growth over the back of scalp. He had suffered a flame burn of this region at the age of 2 months. He was not concerned about burn scar and alopecia, until seven years prior to presentation, when he noticed a growth over the burn scar. The growth had increased in size gradually and formed a flat hard scab. Whenever it reached a size of 1 x 1 cm in 10 – 12 months, it was repeatedly removed manually by patient. In last year, the growth had increased rapidly and the horn projected above the surface of skin to reach the present size.

On examination he had a whitish yellow curved horn measuring 3 cm diameter at base and 8 cm in length, over the external occipital protuberance. A burn scar of 10 x 15 cm with areas of hypopigmentation was present over the back of the scalp (Figure 1). Base of the horn was nontender. Cutaneous horn was excised along with 1 cm safe margin and split skin grafting was done (Figure 2).

The histology revealed epidermis tissue which showed

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Figure 1. Cutaneous horn over external occipital protuberance.



Figure 2. Split skin grafting after excision of cutaneous horn.

plate-like growth with expanded and anastomosing rete ridges, acanthosis and papillomatosis. Features were suggestive of cutaneous horn overlying a seborrheic keratosis.

Skin grafting uptake was good and there was no recurrence of cutaneous horn up to 6 months follow up.

Discussion

Cutaneous horn is unusual cohesiveness of keratinized material from the stratum corneum [3]. The important consideration in these cases is not the horn, but the underlying pathology 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, granular cell tumor, sebaceous carcinoma, Kaposi's sarcoma) [4].

No clinical features reliably distinguish between benign and malignant lesions. However, tenderness at the base and lesions of larger size should raise suspicion of malignancy [5].

Sun exposure is the most important etiological factor in pathogenesis of the cutaneous horn [4]. Radiation exposure and HPV-2 are other risk factors.

Surgical excision of the horn including the base with appropriate margins and careful histological examination to exclude malignancy remains the treatment of choice.

Conclusion

The development of a cutaneous horn over an old burn scar is rare. The main concern is underlying malignancy,

not the cutaneous horn itself. Thus histopathology of the base of the horn is an essential step in the management.

References

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Key points:

- Exposure to sunlight is an important factor in the pathogenesis of a cutaneous horn.
- Tenderness at the base of a horn and a large size should arouse suspicion of malignancy.