

Cutaneous Horn Arising From Burn Scar: A Rare Case Report and Management

Raj Kumar¹, Anjali Sharma², Rahul Gupta³

¹MS General Surgery, Civil Hospital Baijnath, Himachal Pradesh

²Resident Doctor, Department of Microbiology, DRPGMC Kangra at Tanda, Himachal Pradesh

³MD Community Medicine, District Programme Officer, Health and Family Welfare, Himachal Pradesh

Corresponding Author: Anjali Sharma

ABSTRACT

Cutaneous horn is a dense hyperkeratotic conical projection of the epidermis that resembles like an animal horn. This was a rare case which presented with a horn like structure arising over the anterolateral aspect of right thigh. The structure was excised surgically with resection margin and sent for histopathology examination. The revealed no evidence of malignancy. The patient recovered completely without any complications. It has both medical and social implications. Early treatment with wide surgical excision and histopathological examination is necessary to rule out malignancy.

Keywords: Case Report, Cutaneous Horn, India, Surgical Management, Acanthosis

INTRODUCTION

Cutaneous horn is a dense hyperkeratotic conical projection of the epidermis that resembles like an animal horn. They are composed of dead keratin without a bony core but special attention should be paid for the underlying process which may be benign, premalignant or malignant with incidence of 61.1%, 23.2% and 15.7% respectively¹. These lesions are more common in sun exposed parts of body like face, nose, ear, forearm and hands but may also occur in penis, neck, shoulder and eyelid^{2,3}. However there are few reports of these lesions arising from burn scars^{4,5,6}.

CASE PRESENTATION

We describe here a case of 52 years old female presented in the surgical OPD at Civil Hospital Baijnath Himachal Pradesh, India with cutaneous horn over the anterolateral part of right thigh for last two years which was gradual in onset, continuous, progressive, painless, and fixed to the underlying skin. There was no history of any swelling surrounding the lesion. She

had a past history of sustained burns over lower abdomen and bilateral lower limbs about 40 years ago which was managed conservatively. She was a known case of Type 2 Diabetes Mellitus for the last 3 years and Hypothyroidism for the last 5 years, both of which were under control.



Fig. 1 showing cutaneous horn arising from burn scar over right thigh anterolateral aspect

On examination there was a yellowish white coloured horn like structure which was 4.5 cm long and 2 cm wide at base, hard in consistency, rough surface, the base of the structure was non-tender and fixed to the underlying skin arising from the burn scar over the right leg anterolaterally (Fig. 1). The surrounding skin had smooth surface with healed scars of hypo and hyperpigmented areas. No inguinal lymphadenopathy was found on examination.

After giving an elliptical incision to incorporate the lesion and surrounding tissue was excised along with 6 mm margin⁷. Primary closure of the wound was performed (Fig. 2). Postoperative period was uneventful. Histopathological examination revealed hyperkeratosis with acanthosis. There was no evidence of granuloma or malignancy.



Fig. 2 showing primary closure after surgical excision with wide resection margin

DISCUSSION

The earliest well documented case of cutaneous horn was described in 1588 of Mrs. Margaret Gryffith being advertised in pamphlet by a showman for money. Later in 1791 Everard Home and John Hunter described it as a 'medical disorder'⁸.

Cutaneous horns are the rare lesions which grow from the most superficial layer

of skin. These lesions typically occurs in sun exposed areas, particularly the face, ear, nose, forearms, and dorsum of hands. This can be attributed to the relative protection from ultraviolet sun rays by the pigmented skin^{2,3}. However in our patient it arose from non sun exposed area of skin and only a few cutaneous horn of lower limb had been reported⁶.

They usually grow slowly over years to decades as our patient presented after 2 years of growth; however, rapid growth may occur. They are solitary, variable in shape, mostly yellowish-white in colour and vary in size from a few millimetres to many centimetres which can hide the underlying benign or malignant lesions.

Burn scars are known to be healed with hypertrophic scars, keloid, depigmentation of skin, chronic non healing ulcers which may progress to squamous cell carcinoma (Marjolin ulcer). However there are few reports of these lesion arising from a burn scar^{4,5,6}.

In a study conducted by Yu et al, of 643 horns 39% were derived from premalignant and malignant lesions and 61% derived from benign lesions¹. They observed that the premalignant and malignant lesions were significantly associated with site of lesions (more in sun exposed areas) and geometry of lesion (wide base and low height to base ratio).

The key point in our case report is that cutaneous horn arising from a burn scar is very rare finding and it arises at non sun exposed area of body in our patient which has been noted rarely.

CONCLUSION

Cutaneous horn arising from burn scar is a very rare entity and may be considered as rare complication of burns. It has both medical and social implications. Early treatment with wide surgical excision and histopathological examination is necessary to rule out malignancy.

Conflict of interest: The author has no conflict of interest.

REFERENCES

1. Yu RC, Pryce DW, Macfarlane AW, Stewart TW. A histopathological study of 643 cutaneous horns. *Br J Dermatol* 1991;124:449–52
2. Copcu E, Sivrioglu N, Culhaci N, Cutaneous horns, are these lesions as innocent as they appear to be? *World J Surg Oncol.* 2004; 2:18
3. Bondeson J. Everard Home, John Hunter, and cutaneous horns: a historical review. *Am J Dermatopathol* 2001;23:362–9
4. Zinn RJ et al. Giant cutaneous horn arising from a burn scar: a case report and literature review. *World J Med Surg Case Rep* 2014; 3:40–43
5. Nthumba PM. Giant cutaneous horn in an African woman: a case report. *J Med Case Rep* 2007;1:170
6. Al-Zacko SM & Mohammad AS. Cutaneous horn arising from a burn scar. *Journal of burn care & research* 2017;XXX:00-00
7. Motley R, Kersey P, Lawrence C. Multiprofessional guidelines for the management of the patient with primary cutaneous squamous cell carcinoma. *Br J Plast Surg.* 2003; 56: 85-91
8. Bondeson J. Everard Home, John Hunter, and cutaneous horns: a historical review. *Am J Dermatopathol* 2001;23:362–9

How to cite this article: Kumar R, Sharma A, Gupta R. Cutaneous horn arising from burn scar: a rare case report and management. *Int J Health Sci Res.* 2020; 10(8):205-207.
