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CUTANEOUS HORN MIMICKING ANIMAL HORN: CASE REPORT & BRIEF REVIEW

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ABSTRACT

A cutaneous horn is uncommon disease. Most of time it affects elderly men and often arises from sun exposed skin. The horn is frequently conical, made of stratum corneum. Cutaneous horn occurs in coalition with or as a reaction to a wide variety of underlying benign premalignant and malignant skin diseases. It is mandatory to determine the nature of the disease at the base of lesion to rule out malignancy. Surgery is the treatment of choice. Here we report a case of cutaneous horn from sebaceous cyst.

INTRODUCTION

Cutaneous horns are most common in Caucasian patients and relatively less known in Arabic, Asian and rare in people of African descent. This racial tendency can be endorsed to the relative protection of pigmented skin to ultraviolet sun rays[1]. It is a conical projection of hyperkeratotic epidermis. It may resemble an animal horn in appearance but lacks bony core. It may arise from any part of body and only 30% arise from the face and scalp [2]. Most have a yellow-white color, and may be straight or curved and twisted, and vary from a few millimeters to several centimeters in length [2,3]. They are thought to result from underlying benign, premalignant or malignant pathology [4]. Cutaneous horn has been noticed on top of many clinical conditions like keratoacanthoma, actinic keratosis, wart, molluscum contagiosum, seborrheic keratosis, sebaceous cyst, basal cell carcinoma, squamous cell carcinoma[5]. Here we report a patient of cutaneous horn on top of sebaceous cyst.

Case Report

A 62 year old male, farmer presented with horny growth on the outer region of right eyebrow. for the last one years (fig-1a, Fig-1b). Initially patient noticed small cystic swelling over the outer 1/3 rd of right eyebrow about two years .There was no history of pain or discharge from swelling. Swelling was diagnosed as sebaceous cyst and was pinned and burned by an unqualified doctor. He slowly developed this cutaneous horn over this swelling.

On examination there was a hyperkeratotic horny growth arising over a swelling measuring 3×1cm over outer 1/3rd of right eyebrow. It was mimicking an animal horn. There was no pain, discharge or bleeding from swelling. There was no regional lymphadenopathy. Clinical diagnosis of cutaneous horn over sebaceous cyst was made. Excision biopsy was done and specimen sent for histopathological examination. There was concentric layers of cornified epithelial cells along with sebaceous cyst on histopathological examination.

Figure-1a- showing cutaneous horn of scalp

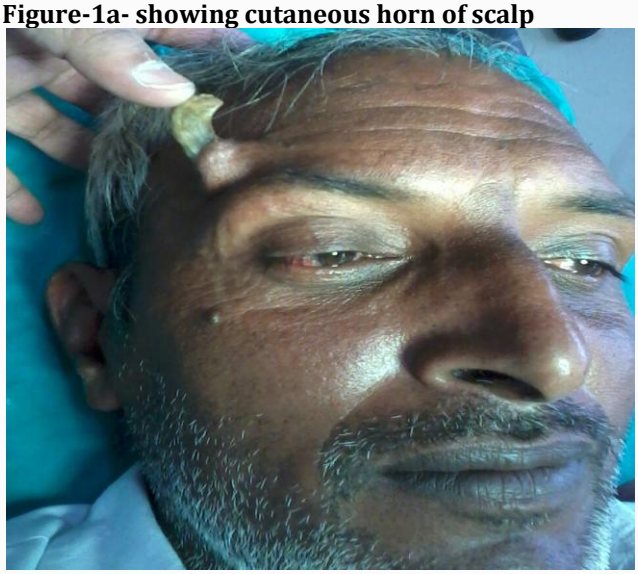

Figure-1b showing closure view

DISCUSSION

Cutaneous horns occur frequently in the rhinoceros, birds and mice but is uncommon in humans. Cutaneous horns are classified into four varieties: sebaceous horns, wart horns, cicatrix horns, and nail horns:

(i) Sebaceous horns arise from sebaceous cysts and arise most commonly on the scalp, (2) Wart horns closely resemble sebaceous horns and are usually found on the penis, (3) Cicatrix horns are rare and grow from the post burn. A laminated horny outgrowth may form the healing post burn ulcer, (4) Nail horns are the most common; and grow from big toe nail in unattended patients [6].

Cutaneous horns are common among Caucasians from Europe, infrequent in India (Asia) and rare in Africa [7,8]. Sebaceous horn of the scalp is desiccated secretions from the orifice of a sebaceous cyst(as in our case). Cutaneous horns are not always from sebaceous cysts. Rather, they are highly keratinized concretions which project above the surface of the skin [9]. They are not always horn shaped. The lesion may also be flat, nodular, or crateriform. These may be elongated, keratinous projections from the skin, ranging in size from a few millimeters to many centimetres that resembles a miniature horn. The horn is composed of compacted keratin. The cutaneous horn usually occurs over sun exposed areas, particularly the face, scalp (as in our case), pinna, nose, forearm, and dorsal aspect of hand [10]. They may also develop over the areas not exposed to sunlight such as the penis, mucosal lower lip, and nasal vestibule [11, 12]. They may arise in company or as reaction from underlying benign (61.1%), premalignant (23.2%) or malignant (15.7%) pathology [13] with squamous cell carcinoma being the most common type [14]. Pain, basal tenderness and large size, are common features of malignancy.[8]

Histologically there is thickened stratum corneum with scattered areas of parakeratosis. The base of horn will display the characteristic feature of the pathologic process responsible for the development of the horn [7, 15].

Clinical examination of cutaneous horns shows a hard, yellowish-brown excrescence, often curved and having a series of laminated circumferential ridges, which is surrounded either by normal-looking epidermis or by an acanthotic collarette. Horns are extremely tough. Horn becomes soft if soaked in a weak solution of potash.

Excision biopsy of the lesion including base and histopathological examination to rule out malignancy is mandatory. Complete removal of the horn with curettage down to normal tissue gives a satisfactory result still there may be a recurrence. Split skin or pinch grafts can be used to cover big defects. A careful physical examination of the lymph nodes draining the area of lesion is mandatory. If malignancy is present then it should be excised with appropriate margins and evaluation for metastasis is done. Other treatment option includes electrocautery, cryotherapy, carbon dioxide or Nd YA Glaser including wide surgical excision [16].

CONCLUSION

As possible malignancy is about 40%, cutaneous horn should be excised carefully and histopathological examination is mandatory to exclude underlying malignant pathology at the base of horn.

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