

Giant Wart as a Cutaneous Horn on the Dorsum of the Hand

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A 81-year-old female presented with a giant cutaneous horn (1.5×2×4 cm sized) over the right hand, rapid growth recent 6 months. Cutaneous horn was excised and split thickness skin graft of the defect was done under regional anesthesia. Histopathology showed overlying a wart. In the current study, we report the case of a patient with giant wart as a giant cutaneous horn in a dorsal side of hand.

Received: February 18, 2016

Revised: April 25, 2016

Accepted: May 1, 2016

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Keywords: Cutaneous horn, Giant, Verucca, Wart

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INTRODUCTION

A cutaneous horn (cornu cutaneum) is a relatively rare epidermal tumor that generally appears as a conical projection of hyperkeratotic epidermis. The height of the keratotic mass should amount to at least half of its diameter to be defined as cutaneous horn¹. It may arise from any part of body, and only 30% arise from the face and scalp¹. Cutaneous horn has been noticed on top of many clinical

conditions like keratoacanthoma, actinic keratosis, wart, molluscum contagiosum, seborrheic keratosis, basal cell carcinoma, squamous cell carcinoma. The lesion can be derived from various underlying lesions, which may be benign, premalignant, or malignant. Therefore, it is important to accurately determine the base of the lesion by histopathologic confirmation². We hereby report a case of a large cutaneous horn at an unusual site, that is, the dorsal aspect of the hand, in a healthy 81-year-old woman.

CASE REPORT

A 81-year-old female, presented with horny growth on the dorsal side of right hand for 1 year duration. A 1.5×2×4 cm-sized, white-grayish hyperkeratotic horn-like tumor was observed (Fig. 1). She had recognized a small erythematous exophytic mass 1.5 years previously, and it had been slowly growing without pain or pruritus. She said a form of bone lesion first seen one year ago. Since then it had grown rapidly recent 6 months. Additionally, the patient had no history of trauma or contact with irritants. No significant family history was present. On exam-



Fig. 1. A horny growth of around 4 cm in length with a broad base over the dorsal aspect of the right hand.

ination, a firm, horny, and straightened growth of around 4 cm in length with a broad base was present over the dorsal aspect of the right hand with no erythema at the base. There was no pain, discharge, or bleeding over growth. No lymphadenopathy was present. Routine blood investigations, urine examination, and chest X-ray were normal. We first suspected the mass to be keratoacanthomas or squamous cell carcinoma. The lesion was surgically excised with 1 cm margin and the defect was closed by split skin graft from right side calf under regional anesthesia (Fig. 2). Histopathology examination (HPE) of the lesion revealed hyperkeratosis, papillomatosis with koilocytes showing perinuclear halo with no evidence of associated malignancy. Hence, HPE was consistent with verruca underlying cutaneous horn (Fig. 3). The graft healed well and the patient was discharged with advice to follow up regularly the lesion was completely excised surgically (Fig. 4). Up to the present date, she is in good physical health without recurrence.

DISCUSSION

Cutaneous horns are elongated, keratinous projections from the skin, ranging in size from a few millimeters to many centimeters that resembles a miniature horn. The

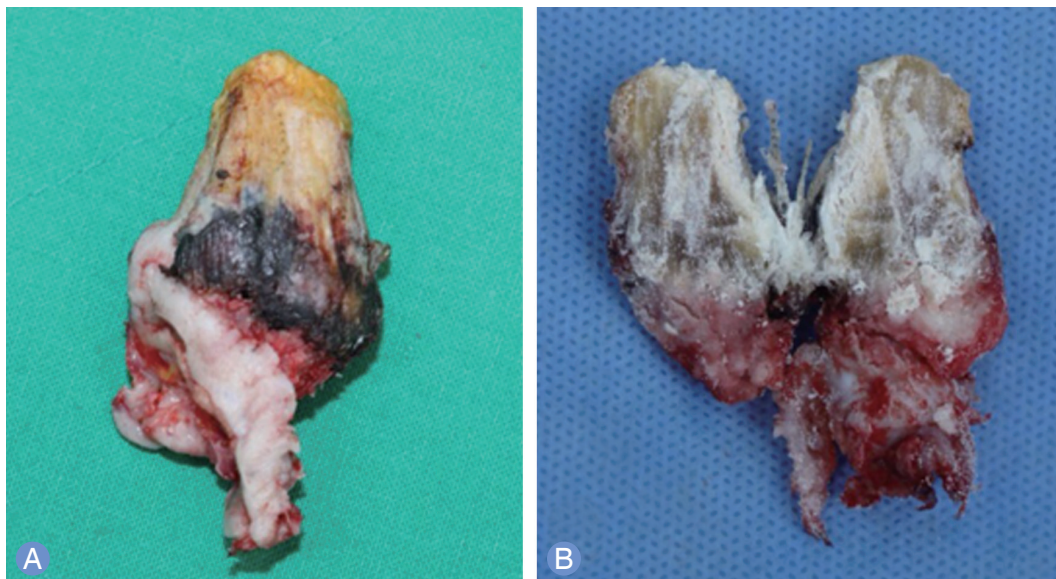


Fig. 2. Excision of cutaneous horn (A), a cutting plane of the cutaneous horn (B).

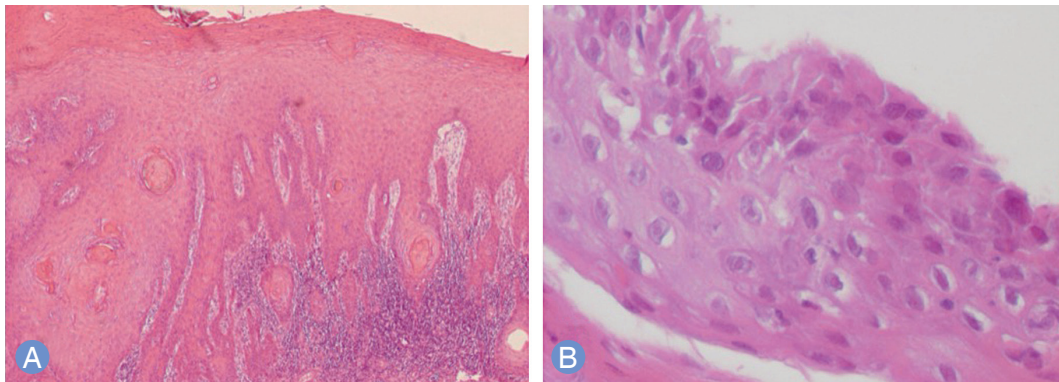


Fig. 3. The histologic characteristics of this lesion is epidermal hyperplasia manifested by hyperkeratosis, parakeratosis, acanthosis, papillomatosis and elongation of rete ridges (H&E, $\times 40$) (A), Koilocytotic cells, characterized by small, round, deeply basophilic nuclei surrounded by a clear halo and pale-staining cytoplasm are also present (H&E, $\times 400$) (B).



Fig. 4. The lesion was completely excised surgically and the graft healed well without recurrence.

base of the horn may be flat, nodular or crateriform. The horn is composed of compacted keratin. The distribution of cutaneous horns usually is in sun-exposed areas, particularly the face, pinna, nose, forearms and dorsal hands. Usually, a cutaneous horn is several millimeters long. The pathogenesis of cutaneous horn is not yet clear. It is thought continuous stimulus may affect the formation of

a cutaneous horn. Old age and abundant blood vessels at the base are also associated with cutaneous horn. Malignancy is present in 16%–20% of cases, with squamous cell carcinoma being the most common type³. The differential diagnosis for cutaneous horns includes in situ or invasive squamous cell carcinoma, keratoacanthoma, actinic keratosis, verruca, seborrheic keratosis, and epithelial neoplasms such as trichilemmoma⁴. Most are benign as shown in a large study of 643 horns which revealed 38.9% originated from malignant or premalignant epidermal lesions, and 61.1% from benign lesions⁵. The lesion in our case was thought to be either a keratoacanthoma or a squamous cell carcinoma initially. We suggest a malignant change of the horn because of the large size of the horn and rapidly growing recent six months to visit the hospital. However, malignant or premalignant lesion was not confirmed on biopsy. Tenderness at the base of the lesion and lesions of larger size favor malignancy. Giant cutaneous horns are usually but not always associated with malignancy as in our case wherein histopathology did not reveal evidence of malignancy. The horn at the base will display features characteristic of the pathologic process responsible for the development of the horn⁶. The underlying associations are more important than the overlying fascination. Excision biopsy of the lesion and histopathological examination to rule out malignancy is recommended. Malignancies should be excised with appropriate margins and evaluated for metastasis. A careful

physical examination of the lymph nodes draining the area of lesion often is adequate. Hence, surgical excision remains the treatment of choice⁷. A full thickness wide local excision with an adequate margin should be obtained⁸. Lesion tenderness within the lesion and giant size generally point towards malignancy. The high association of premalignant and malignant lesion requires the surgical specimen to be sent for histopathological assessment, as the base of the horn will display the characteristic feature of the pathologic process responsible for the development of the horn, which in our case was verruca⁹. Other options for treatment include electro cautery, cryotherapy, carbon dioxide and Nd:YAG laser¹⁰. These are probably used only in low index of suspicion for malignancy. We can predict that the possibility of malignant change is higher in most cases, if the cutaneous horn is bigger in size, with spacious base and long disease period. In this case, the base is narrower than the height. The disease period is short, and there is no malignant change in biopsy. So, the main idea of this case is that the width of the base and period time can be the important predictors of malignant change than the size of the cutaneous horn.

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수배부에 피각 형태로 나타난 거대 사마귀

조흥만 · 이규정 · 민웅배 · 최용석

광주 보훈병원 정형외과

81세 여자 환자가 6개월 전부터 급격히 크기가 증가하는 우측 수배부의 거대 피각(1.5×2×4 cm)을 주소로 내원하였다. 부위 마취하에 피각을 완전 절제하고 피부이식술을 시행하였으며 조직 검사 결과는 사마귀였다. 저자들은 수배부에 발생한 전형적인 피각 형태의 거대 사마귀 1예를 경험하였기에 문헌 고찰과 함께 보고하는 바이다.

색인단어: 피각, 거대, 사마귀

접수일 2016년 2월 18일 수정일 2016년 4월 25일

게재확정일 2016년 5월 1일

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