Penile cutaneous horn

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Case Report

INTRODUCTION

Penile horn is a hyperkeratotic lesion on the glans penis, which is also known as cornu cutaneum or cornu humanum. The horn is composed of compact keratin and may be caused by various epidermal changes. This term was proposed for lesions in which the height of the keratotic mass amounts to at least half of its diameter. The usual site of a cutaneous horn is usually on the face and scalp, i.e., sun-exposed areas. Its location on the glans penis is very rare. We present a case report of such a patient presented with penile cutaneous horn.

CASE REPORT

A 35-year-old male patient has been reported in our outdoor with a complaint of a hard lesion on the glans penis. The lesion started 4 years back when it was a small pea-sized nodule and increased progressively to the present size of around 4 cm × 3 cm obscuring almost whole of the glans penis. Physical examination revealed a hard, nontender, pointed growth on the glans penis without any surrounding induration [Figure 1]. There was no palpable inguinal lymphadenopathy. Systemic examination was unremarkable. The lesion was excised with adequate margin, and the wound was closed primarily. Histopathological examination of the excised specimen showed hyperkeratosis, acanthosis, and parakeratosis [Figure 2]. There was no evidence of malignancy. Postoperative recovery was uneventful, and the patient was discharged in a stable condition and was on regular follow-up for the past 1 year.

DISCUSSION

A cutaneous horn is typically a projection from the skin, which most commonly occurs in photo-exposed areas of the body, most commonly on the scalp and face. Its incidence on the penis is very rare. Cutaneous horns most commonly occur in males and in the age group of more than 50 years. A corn is a cornified material resembling a horn of an animal. This term is used when the height of the lesion is more than half of its diameter. The
earliest documented case of a cutaneous horn, or cornu cutaneum, of an elderly Welshwoman in London was displayed commercially as an anomaly of nature in 1588.[2] The first case of a cutaneous horn was described in 1854, and since then, fewer than 100 cases have been reported.[3] It is composed of compact keratin and may be caused by various epidermal events occurring on the skin such as warts, seborrheic keratitis, and molluscum contagiosum. The association of cutaneous horn with benign lesion is 61%, whereas associated with malignant and premalignant lesions is 39%.[3] The European Association of Urology guidelines classify penile horn as a premalignant condition.[4] Etiological factors of penile cutaneous horn are uncertain, but human papillomavirus (HPV) infection may be one of the causative factors. Solivan et al. identified a positive HPV reaction for HPV 16 using in situ DNA hybridization.[5] Other than HPV, etiology can be broadly classified into benign (warts, seborrheic keratitis, molluscum contagiosum, and inverted follicular keratosis), premalignant (Bowen’s disease and solar keratosis), and malignant (basal cell carcinoma, squamous cell carcinoma, and Kaposi sarcoma). There is a role of phimosis, chronic irritation, and surgical trauma in the predisposition of penile horn with associated malignant transformation.[6]

The treatment of penile cutaneous horn is a surgical excision of lesion along biopsy from the base of the lesion. Histopathological biopsy from the base of lesion tells about the underlying cause of the penile horn, which can be benign or malignant. Other than surgical excision, various other methods are also there, such as laser therapy and administration of keratolytic agents.[1, 7, 8] Laser therapy with carbon dioxide or neodymium: yttrium-aluminum-garnet laser has least scarring with more cosmetic results. If it is associated with malignancy, partial penectomy is advised. Other investigations for diagnosing infiltration are magnetic resonance imaging (MRI), which is useful when there is uncertainty about infiltration. MRI is a useful modality to diagnose the status of infiltration in preoperative period.

CONCLUSION

Cutaneous horn is a keratinized protrusion above the skin, which mostly occurs on the face and scalp. Its presentation on the penis is very rare. Penile cutaneous horn is associated with benign and malignant conditions. Hence, histological examination should be done carefully. If it associated with malignancy, partial penectomy should be done.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflicts of interest

There are no conflicts of interest.

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