

Penile cutaneous horn: still an enigma

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DESCRIPTION

A 60-year-old man with history of Johanson's staged urethroplasty for pan anterior urethral stricture due to lichen sclerosus et atrophicus 3 months previously presented to us with a cutaneous horn over his glans penis. This horn was previously excised superficially, and now had recurred over the same site in the last 1 month. It was initially small in size and then gradually increased to a size of around 2.5 cm (figure 1). The patient had no documents mentioning the histopathology of previously excised horn. The patient had been circumcised in childhood. He had no history of genital malignancy or other factors that could have been implicated in cutaneous horn formation. He was managed with excision of the horn along with deep biopsy from base of the lesion to rule out any malignant pathology. The excision site healed well, and biopsy revealed benign pathology. At present, patient has no persistent changes in glans/penile shaft related to lichen sclerosus et atrophicus, and he is on regular follow-up.

The term 'cutaneous horn' is a morphological designation referring to unusually cohesive keratinised material and is not a true pathological diagnosis.¹ Lowe and McCullough reported that penile horn might be benign in 42%–56% of cases, premalignant in 22%–37% or frankly malignant in 20%–22%.² The aetiology for development of penile horn is not clear. However, various factors are implicated in its development that include

surgical trauma, long-standing phimosis, radiotherapy or malignancy. The histopathology of cutaneous horns reveals a keratotic mass containing keratin with closely agglutinated epidermal cells, forming small columns or rods.

The patients usually seek treatment due to disfigurement and difficulty during sexual intercourse. It is bothersome to the patients, sometimes greatly affecting their sexual life.

Since penile horn may be benign or malignant, management involves establishing the diagnosis followed by definitive treatment based on histopathology. For benign condition, excision of horn is sufficient, and for malignant lesions, partial/total glans resurfacing with partial thickness skin graft (for lesions up to T1),³ wide local excision or in some cases, penectomy may be required.

Learning points

- ▶ Penile cutaneous horn may recur and demonstrate malignant change on repeat biopsy even when initial histology is benign.
- ▶ Patient's apprehension should be alleviated and properly counselled regarding recurrence and bothersome sexual life.
- ▶ As cutaneous horn may originate from underlying malignancy, patient should be kept on close follow-up.

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Figure 1 Clinical photograph of the patient showing horn over the glans penis.



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