

Penile cutaneous horn: still an enigma

Ajay Aggarwal, Siddharth Pandey, Samarth Agarwal, Gaurav Garg

Department of Urology, King George's Medical University, Lucknow, Uttar Pradesh, India

Correspondence to

Dr Ajay Aggarwal,
drajayaggarwal2004@gmail.com

Accepted 23 August 2018

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.

Contributors AA, SP: concept, design, supervision, processing, writing manuscript and critical analysis. SA: concept, supervision, writing manuscript and critical analysis. GG: supervision, processing, writing manuscript and critical analysis.

Funding The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests None declared.

Patient consent Obtained.

Provenance and peer review Not commissioned; externally peer reviewed.

REFERENCES

- 1 Karthikeyan K, Thappa DM, Jaisankar TJ, et al. Cutaneous horn of glans penis. *Sex Transm Infect* 1998;74:456–7.
- 2 Lowe FC, McCullough AR. Cutaneous horns of the penis: an approach to management. Case report and review of the literature. *J Am Acad Dermatol* 1985;13:369–73.
- 3 O'Kelly F, Lonergan P, Lundon D, et al. A prospective study of total glans resurfacing for localized penile cancer to maximize oncologic and functional outcomes in a tertiary referral network. *J Urol* 2017;197:1258–63.



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



© BMJ Publishing Group Limited 2018. No commercial re-use. See rights and permissions. Published by BMJ.

To cite: Aggarwal A, Pandey S, Agarwal S, et al. *BMJ Case Rep* Published Online First: [please include Day Month Year]. doi:10.1136/bcr-2018-225930

Copyright 2018 BMJ Publishing Group. All rights reserved. For permission to reuse any of this content visit <http://group.bmj.com/group/rights-licensing/permissions>.
BMJ Case Report Fellows may re-use this article for personal use and teaching without any further permission.

Become a Fellow of BMJ Case Reports today and you can:

- ▶ Submit as many cases as you like
- ▶ Enjoy fast sympathetic peer review and rapid publication of accepted articles
- ▶ Access all the published articles
- ▶ Re-use any of the published material for personal use and teaching without further permission

For information on Institutional Fellowships contact consortiasales@bmjgroup.com

Visit casereports.bmj.com for more articles like this and to become a Fellow