

Trauma and reconstruction

Total involvement of penis, scrotum and pubis by giant melanocytic nevus: A unique presentation

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ABSTRACT

Giant melanocytic nevus is a rare dermatological condition. However, total involvement of male genitalia and pubic area has never been reported in the literature and this presentation is considered the first reported case of such condition. The choice of reconstructive intervention should be tailored to the patient's expectations, body habitus and previous surgical procedures.

Introduction

Giant melanocytic nevus is considered a rare dermatological condition, especially in the genital area and it is recognized as a risk factor for the development of melanoma.¹ However, malignant penile melanoma accounts for less than 2% of all malignant lesions of the penis and mostly occurred in the sixth and seventh decade of age.² Divided or in another term "kissing" penile nevus was reported in the literature for the first time in 1998 by Desruelles et al. and since then, less than 17 cases were reported of this type of nevus at this location.^{3,4}

Case presentation

A 25-year-old man with a giant penoscrotal and pubic nevus presented to the urology clinic complaining of inability to perform sexual intercourse due to large phallus size (Fig. 1). The nevus overlying the penis and pubis was very thick compared to the nevus on the scrotum. He had extremely limited normal donor skin due to involvement of most of his body with melanocytic nevi. The area in his right thigh was the only available area for skin harvesting. He underwent limited excision of the nevus including all penile skin with partial scrotoectomy, then split thickness skin graft (STSG) from right thigh to penis with scrotoplasty

(Fig. 2a–c). The aim was to excise the nevus till reaching healthy tissue. Of note, the deeper tissues were still abnormally discolored, but the aim was to excise enough tissue to allow for adequate sexual intercourse. He achieved normal penile diameter adequate for normal sexual activity at the end of the procedure. Histopathological examination showed melanocytic nevus with congenital features and no signs of malignancy (Fig. 2d). At 18-months follow-up visit, the patient was satisfied with sexual function and reported mildly decreased sensation and slightly bothersome itching (Fig. 3a and b). It is worth mentioning that the patient had an obstructive low-volume azoospermia with normal spermatogenesis on testicular biopsy, which was done in the same operation. The vas deferens was palpable bilaterally and both seminal vesicles were noted in normal size and echogenicity on trans-rectal ultrasound imaging. Consent was obtained from the patient to publish these images, and IRB approval was obtained.

Discussion

Total involvement of male genitalia and pubic area has never been reported in the literature and this case is considered the first reported case of such condition. The choice of the reconstructive intervention should be tailored to the patient's expectations, body habitus and

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Fig. 1. Pre-operative image showing giant nevus involving pubic and penoscrotal skin.

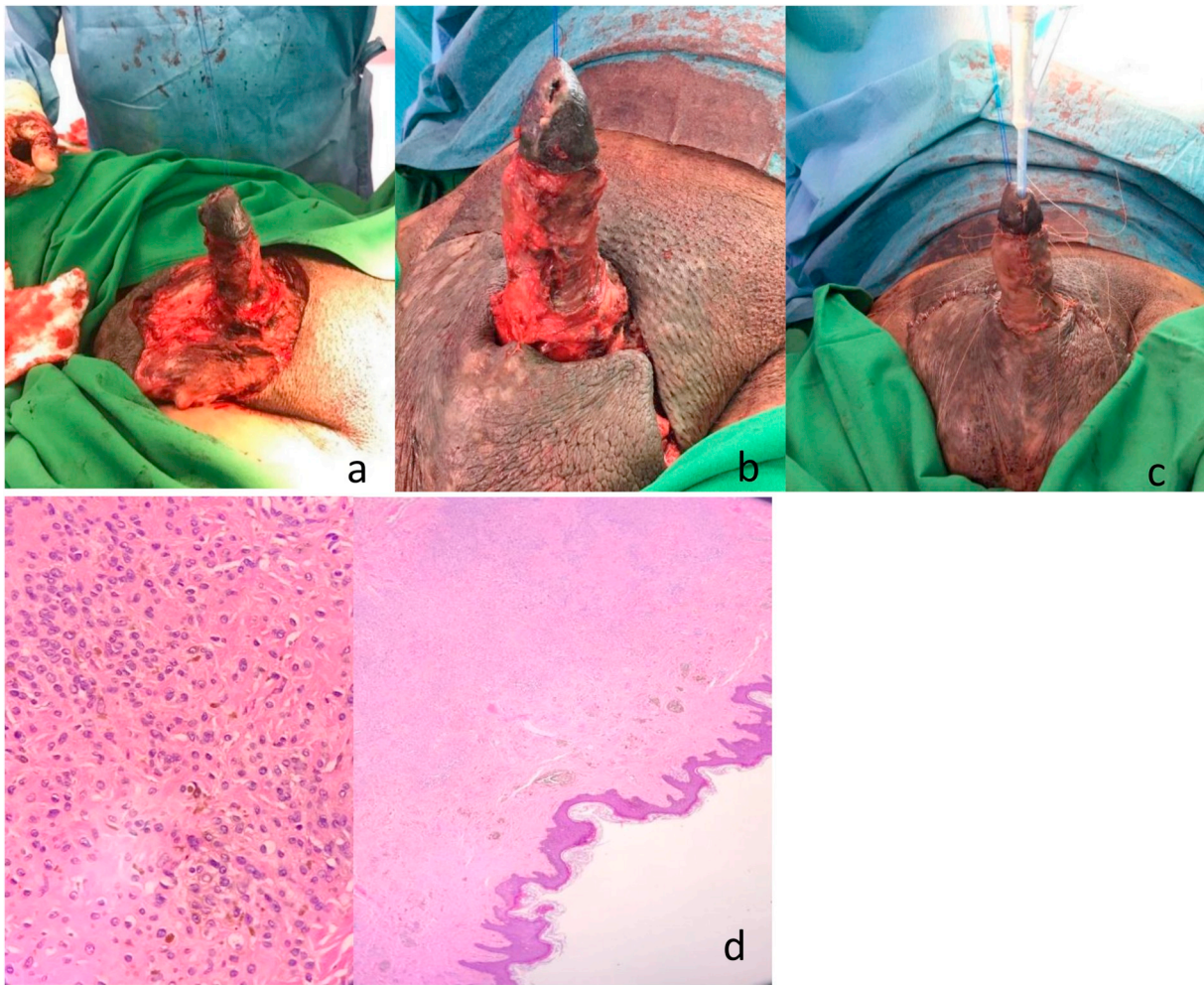


Fig. 2. Intra-operative images. **Fig. 2a:** showing total excision of penile shaft skin and partial excision of pubic and scrotal nevus. **Fig. 2b:** showing approximation of remaining pubic and scrotal skin. **Fig. 2c:** showing scrotoplasty. **Fig. 2d:** penile skin section showing pigmented nests of nevus cells at the dermal-epidermal junction and involving nearly two thirds of the lower reticular dermis with evidence of maturation.



Fig. 3. 18-months follow-up images.

previous surgical procedures. The skin grafts remain the technique of choice to repair penile skin defect of the shaft and good option to restore scrotal skin defect.⁵

Conclusion

This case report provides a documentation of an interesting case of giant penoscrotal and pubic nevus and its reconstruction.

Financial disclosure

The authors declare that they have no relevant financial interests.

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