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Letter to the editor

Male genital trauma caused by self-mutilation: A first case series report in Indonesia

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To the Editor,

We read with great interest the article titled "Male genital trauma caused by self-mutilation: a first case series report in Indonesia" [1]. The Authors presented a very interesting case series of genital trauma treated following the EAU guidelines, including a very severe case of penile and scrotal avulsion managed with debridement- necrosectomy, ligation of right and left spermatic cords and local skin flap reconstruction. We congratulate with the Authors for their article, and we completely agree with them for the chosen reconstructive strategy, but we have some elements to discuss.

The state of the art shows many different techniques for shaft penile reconstruction, including skin grafts, local and free flaps. Although the simplicity of the method, skin grafts should not be the first reconstruction option because of the higher risk of retraction, poor tissue elasticity limiting extensibility during erection, and less resistance to sexual intercourse. Since the bulky nature of free flaps, if any, might represent some difficulties during penetration and poor aesthetical outcomes producing unnatural appearance, local flaps remain the gold standard for penile reconstruction. Based to similar principles, the scrotum seems to be the most suitable tissue for shaft repair, including color, thickness, pliability, elasticity and consistency, able to provide a large amount of tissue and obtaining satisfactory outcomes in terms of aesthetic and functional result, avoiding also mismatch disorder.

The multi-origin vascular system providing the scrotum is supported on each side by four different vessels: the anterior and lateral scrotal artery, the lateral branch of posterior scrotal artery and the septal scrotal artery. These vessels running through Dartos fascia render the scrotal Dartos-myo-cutaneous flap an axial flap, allowing safely a single surgical operation avoiding discomfort related to a second procedure and the vascular network of the scrotum allows a large amount of tissue harvesting in a single step [2–6].

The scrotum provides a very large amount of thin and stretchable tissue permitting a satisfactory coverage to the large recipient damaged area, allowing, at the same time an easy donor site primary intention closure. The skin quality of the scrotum results suitable during erection due to its elasticity and appropriate during sexual intercourse because of its thickness (Fig. 1).

It would be useful to know from the Authors more surgical reconstructive details such as shapes and flaps dimensions. How did they harvest the local flaps employed to cover the penile shaft?

One of the most uncomfortable disadvantages following the use of scrotal dartos-fascio-myo-cutaneous flap for penile injuries repair consists in the high hair density of the scrotal skin that could interfere with both the penile functional aspect and its final aesthetic appearance. Did the Authors predict laser-assisted permanent hair removal?

Spontaneous penile erection in the early post-operative period could severely interfere during the wound healing process causing unsuitable dehiscence which may have a tendency to become infected or result in a retracting scar causing future functional limitations. Have the Authors considered this aspect of treatment? To this regard do the Authors suggest specific accoutrements?

In conclusion, we share that scrotal dartos-fascio-myo-cutaneous flaps for one single stage penis shaft reconstruction represents one of the most suitable reconstructive strategies, but more details are still necessary to optimize the procedure.

Ethical approval

None.

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None.

Author contribution

Alessandro Innocenti: conception and design of the work, analysis and interpretation of data, drafting of the manuscript, critical revision of the manuscript for important intellectual content supervision

Alice Letizia Andreoli: acquisition data

Guarantor

The corresponding author is the guarantor of submission.

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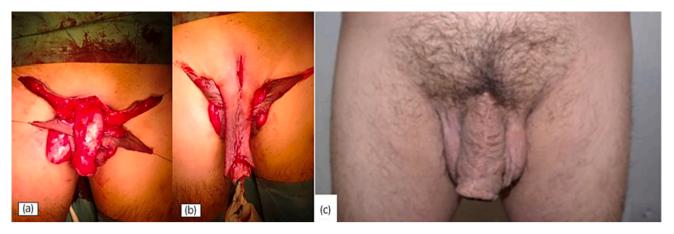


Fig. 1. (a) Intra-operative view showing two Dartos-myo-cutaneous flaps harvested from the scrotum bilaterally; (b) anterior surface of the penile covered by the two Dartos-myo-cutaneous flaps sutured onto the midline of the shaft; (c) 11-month post-operative view reporting full recovery in length and girth of the penis showing the availably of elastic, pliability tissue.

Conflict of interest statement

None declared.

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