



## TRAUMATIC PENILE AMPUTATION: A CASE REPORT

### General Surgery

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### ABSTRACT

Traumatic amputation of the penis is a rare surgical emergency. Although repair techniques have been well described in literature. Herein, we report the case of a 49 year old male who underwent an assault 10 days back, resulting in penile amputation and presented with a small and infected proximal stump with purulent discharge, for whom "Penile Reconstruction" was done by midline incision with mobilizing the suspensory ligament.

### KEYWORDS

#### Case report

We report the case of a 49 year old male, with traumatic penile amputation as result of assault, for whom penile reconstruction was done.

A 49 year old male came to our casualty with amputated penis which resulted from an assault in a wine shop 10 days back. Pt was complaining of pus discharge from the proximal stump. Stump was around 2 cm from the root. There were no associated injuries. Pt was catheterized 10 days back in a government hospital immediately after the happening. On examination raw area was present of the visible transverse plane of the amputated stump. Purulent discharge was present. Tenderness and other sign of inflammation were present.

Immediately patient was admitted, minimal wound debridement done. Thorough cleaning and dressing done. Adequate antibiotics coverage given along with daily dressing. After the infection subsided, patient was taken up for penile reconstruction. Midline incision given superior and inferior to penile root. Incision deepened till muscles were visible. Muscular stump i.e suspensory ligament dissected and bought out along with the urethra intact. Flap raised and closed deeper to create a new root. Integrity of corpus, urethra and dorsal vessels were confirmed. Skin closed with 3-0 Ethilon sutured. Post reconstruction, Split Skin Grafting done over the raw stump. Sterile dressing done using bactigras.



Following the surgical procedure. The first look was given on POD 4, minimal purulent infection was there. Through cleaning and dressing done. This was followed by another look on pod 7 which showed minimal infection with better graft uptake of >70%. Foley's catheter was insitu and passing clear urine. Psychiatric consultation done for the patient. And the patient improved symptomatically and hence was discharged.

Regular follow up was done at a 2 week interval to see a clean and healthy reconstructed penis



#### DISCUSSION

Penile reconstruction presents a complex series of issues. Often, management consists of not only surgical reconstruction, but also psychological rehabilitation. Psychological needs vary greatly, ranging from patients seeking gender reassignment surgery to those presenting after traumatic penile amputation. The loss of the penis negatively affects many different aspects of life, such as one's psychological well-being and relationship with spouse or partner.

In all cases, the goals of surgery are to create or restore a functional and aesthetic phallus. This entails the ability to void standing from the tip of the phallus and the ability to achieve sexual function, with a sensate penis of sufficient bulk to allow penetration for sexual intercourse. Of importance is also the appearance of the reconstructed phallus, which should resemble a normal penis in all aspects from glans to shaft.

The extent of the defect dictates the means of reconstruction. A surgical defect may range from one involving a single tissue or structure, such as skin or urethra, to a total penectomy defect, which would require microsurgical reconstruction. The buried penis is another interesting problem, which entails different surgical requirements. In this article, we review reconstructive modalities for various types of penile defects, and describe recent basic science advances, which may promise new options for penile reconstruction.

If there is partial preservation of the penile shaft, measures to augment the length of the penis such as severing the suspensory ligament or with V-Y plasty of the lower abdominal skin, may be sufficient to achieve a functional phallus.<sup>3,4</sup> An illusion of increased penile length is perceived resulting from penile descent and increased convexity of the penile base. This reconstructive option is suitable for defects where a remnant penile length of 2-3 cm is preserved, with the ability to urinate in a standing position. In older patients with multiple comorbidities, penile augmentation may be an adequate option in lieu of complex free flap surgery. Complications may include "scrotalization" where the penis is covered by unsightly scrotal corrugated skin rather than by natural smooth skin, hypertrophic scarring, and a low hanging penis.<sup>5</sup>

Isolated skin loss may result from penile trauma, burns, or excisional debridement of hidradenitis suppurativa. In these cases, split thickness skin grafting allows good reliable coverage. Increased use of vacuum assisted closure (VAC) dressing (Kinetics Concepts Incorporated, San Antonio, TX) in these difficult areas has resulted in increased skin graft take and improved results. In cases not amenable to immediate split-thickness skin grafting, Integra (Integra Life Sciences Corp., Plainsboro, N.J.), a dermal substitute comprised of bovine collagen, results in a vascularized bed and may allow for skin grafting after removal of its overlying silicone sheeting 3 weeks after initial

application. Scrotal skin flaps based on the anterior and posterior scrotal arteries may also be used in cases of skin deficiency,<sup>6</sup> and are also used in reconstruction of partial penectomy defects.

## CONCLUSION

Reconstruction of penis amputation is challenging task even for most talented surgeons. Function of urethra was preserved. The morbidity was hence reduced allowing the patient we believe this technique may be valuable to surgeons who might encounter this rare event in their surgical practice, especially in resource limited settings like ours.

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