

## CASE REPORT

# TRAUMATIC DEGLOVING INJURY OF PENIS AND SCROTUM : A CASE REPORT

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### Abstract:

*Avulsion injury of penis and scrotum are uncommon event caused by accidents and industrial machines and agricultural machine belts.*

*Here I report the case of a 38-year old patient with avulsion and traumatic degloving of the penile and scrotal skin, with exposure of the cavernous bodies, spongy body, and testes due to an agriculture machine accident. Reconstruction was performed and achieving a satisfactory esthetic result, normal voiding and reestablished sexual function.*

**Key words:** penis; scrotum; wounds and injuries; reconstructive surgical procedures

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### Introduction

Skin avulsion of male genitals are a rare urological emergency. Although not life-threatening, such lesions are incapacitating and psychologically devastating and occur mainly because of accidents with industrial machines or agricultural machine belts. Avulsions vary from simple lacerations to virtual emasculations. Generally, lesions reach only the skin, causing minimal bleeding without producing damage to cavernous bodies, the spongy body or testes.

### Case Report

A 38 years old agriculture worker attended the emergency department of DMCH and was admitted in the Urology department of same hospital in May 23, 2012 suffering from trauma to the external genitalia because of a work accident involving harvester machinery. A total avulsion of penile and anterior scrotal skin was detected. Posterior scrotal skin was intact.

The patient was taken to the operation theater approximately 4 hours after the accident. Following spinal anesthesia, a careful cleaning, and a debridement of devitalized tissues were done. Both testis were opposed with multiple interrupted sutures. The remaining posterior scrotal skin was used for primary closure.

Split thickness skin graft was taken from right thigh and it was used to cover the anterior scrotum and penis. Dressing was applied. Dressing and catheter was

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Fig.-1: Traumatic degloving injury of Penile and scrotal skin



Fig.-2: Debridement of devitalized tissues.



**Fig.-3:** Penile shaft covered with split thickness skin graft with anterior scrotum.



**Fig.-4:** Final stage of penile & Scrotal reconstruction



**Fig.-5:** Removal of dressing on 5<sup>th</sup> post operative day

removed on 5<sup>th</sup> postoperative day. Post operative micturition and erectile function was normal.

### Comments

Agriculture and Industrial machine pulleys, chains and rotary discs were responsible for the injury when they grasped the operator's clothes and pulled out the skin of the genital region. The skin was torn at the scrotum, dragging the skin overlay from the base of the penis while the connection with the coronal sulcus remaining intact.

Part of the scrotal skin was included in the loose segment. There was no significant blood loss. After cleaning and debridement of devitalized tissues, the exposed tissues were covered with viable flaps from the remaining skin. When there is no available skin, penile burial in the scrotum or in the suprapubic region is performed. In the reported case, the posterior portion of the scrotal skin was available for suture and this tissue was used to cover the left testis and the base of the penis. At a subsequent stage, we opted for using a free graft to cover the dorsal bleeding area of the penis. Other techniques, such as testicular burial in the inguinal region or the inner thigh or expansion of the scrotal tissue can be employed as well. Among the post-operative complications that have been reported in the literature are edema, infection, hemorrhage and cicatricial retraction. The treatment of these complications must be the most conservative possible in order to bring benefits to the patient.

### Conclusion

Degloving injury of the penis and scrotum are rarely, if ever, life threatening. However the psychological trauma inflicted on male patient by this type of injury that need special care and attention by the doctor, great need for restoration of the form and function of the penis.

**Conflict of Interest :** None Declared

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