

# Traumatic Penile Partial Amputation: A Case Report

<sup>1</sup>Andreas Hardeyanto, <sup>2</sup>Dhani Dwi Yunanto, <sup>3</sup>Zafir Jehan Andika

<sup>1</sup>Departement of Urology, Bekasi, Indonesia

<sup>2</sup>Regional Public Hospital Bekasi Distric, Bekasi, Indonesia

<sup>3</sup>Bhayangkara Hospital TK I R. Said Sutanto, East Jakarta, Indonesia

**Abstract:** Traumatic amputation of the penis is a rare surgical emergency. Penile amputation is usually caused by self-mutilation, accidents, circumcision, assault and animal attacks. We report the clinical case of a 62-year-old man was treated for open trauma to the penis which occurred five days before entering the hospital due to a mental disorder of the patient whose tied the penis using a rubber band. After conditioning, exploration in the operating room found partial amputation of the penile shaft with partial rupture of the urethra, it was performed urethral replantation and penile shaft anastomosis. With appropriate and fast actions, a very good recovery was obtained on the patient

**Keywords:** Traumatic, penile, urethra.

## INTRODUCTION

Traumatic amputation of the penis is a rare surgical emergency [1]. The main etiologies for penile amputation are self-mutilation, accidents, circumcision, assault, and animal attacks [2]. Accidental injury covers a large portion of external genitalia trauma because of the high prevalence and severity of this disease. Penile amputation involves the complete or partial severing of the penis. A complete transection comprises severing of both corpora cavernosa and the urethra. Amputation of the penis may be accidental but is often self-inflicted, especially during psychotic episodes in individuals with mental illness [3].

## METHODS

This is case report in a secondary care center, patient was followed up in terms of diagnosis and treatment in group.

## CASE DESCRIPTION

A 62-year-old man came to the emergency department with complaints of pain in the penis since one day ago, the initial complaint was felt when the patient had an erection in the morning and when he wanted to urinate, but the complaints got worse, the patient initially did not admit, but after being forced, the patient admit that he tied his penis using a rubber band since five days ago. During physical examination a blood clot appeared around the penile shaft (Fig. 1), then a silicone foley catheter was inserted and immediate surgery was performed. A rubber band around the penile shaft was discovered in the operating room (Fig. 2) and partial amputation of the penile shaft with partial rupture of the urethra (Fig. 3), then sutured from the urethra and then the penile shaft. (Fig. 4)

After replantation, the patient was given antibiotics and analgesics. On the follow-up after the third day of surgery, the patient had no complaints of fever, pain had decreased, had a good wound condition (Fig. 5) and normal activity with a urinary catheter. The patient was discharged and was advised to have a follow-up in the urology and psychiatric clinic after one week. At the control at the clinic, the wound was very good and the penile shaft was vital (Fig. 6).



**Fig. 1** Examination a blood clot appeared around the penile shaft



**Fig. 2** Rubber band that is removed from the penile shaft



**Fig. 3** Partial amputation of the penile shaft with partial rupture of the urethra.



**Fig. 4** Suturing of the urethra and then of the penile shaft.



**Fig. 5** The condition of the wound on the third day after surgery.



**Fig. 5** Wound condition after one week of control at the urology clinic

## DISCUSSION

Penile amputation is a rare urologic emergency. However, it carries major functional and psychological consequences regarding the patient's overall quality of life. Male is prone to have external genitalia trauma more than female because the male is more exposed to violence or extreme exercises [4]. The classification of trauma is important to establish a strategy of treatment. Traumatic injury to the penis may concomitantly involve the urethra [5]. Most of the cases reported with self-mutilation result from severe substance-induced psychosis or underlying psychiatric disorder [6]. In this case, the trauma to the patient was caused by a mental disorder so that the patient unconsciously tied his own penis using a rubber band.

In these patients, the results of replantation looked very good, due to several factors, one of which was that the penile shaft tissue had not yet entered the stage of necrosis, because the rubber band formed a blood clot so that the penis still received blood supply. Previous studies suggested that the total ischemic time of the penis is below 15 h (in average 7 h) is associated with the successful outcome of the penile replantation [7]. The most common complications reported were skin necrosis, decreased penile skin sensation, and erectile dysfunction [8].

## CONCLUSION

A traumatic penile partial amputation is a rare urologic emergency. Self-inflicted amputation is often found in a patient with a history of psychological or mental illness. The main goal of successful penile replantation is to take action as soon as possible, surgical expertise and equipment available at the hospital, and minimize complications such as erectile dysfunction, urethral stricture and urinary tract infections.

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