

**Case Report**

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**Bottleneck emergency: A case of penile strangulation****Muhammad Zohaib Rehman<sup>1\*</sup>; Arjun Singh<sup>1</sup>; Akash Kumar Arora<sup>2</sup>; Malik Shehryar<sup>1</sup>; Muhammad Hamad Ali<sup>3</sup>; Junaid Imran<sup>4</sup>; Abdullah Wahdan Yahya<sup>5</sup>; Muhammad Aneeqe Ijaz<sup>1</sup>**<sup>1</sup>House Surgeon, Lady Reading Hospital, MTI, Peshawar, Pakistan.<sup>2</sup>Post Graduate Resident, General Surgery, Lady Reading Hospital, MTI, Peshawar, Pakistan.<sup>3</sup>House Officer, Emergency Medicine, Lady Reading Hospital, MTI, Peshawar, Pakistan.<sup>4</sup>House Surgeon, Hayatabad Medical Complex, Peshawar, Pakistan.<sup>5</sup>House Surgeon, Ayub Teaching Hospital, Abbottabad, Pakistan.**\*Corresponding Author:****Muhammad Zohaib Rehman**House Surgeon, Lady Reading Hospital, MTI,  
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**Abstract**

This case report describes a 60-year-old male who was referred to our hospital due to penile strangulation by a plastic bottle neck with marked oedema and ischemia. The patient diagnosed with Bipolar affective disorder which is characterized by impulsivity and episodes of mania registered himself at the emergency department after being in pain and suffering from urinary retention for 12 hours. In attempt to provide relief the following interventions were performed on the infants after delivery; Application of pressure and traction using finger compression, liberal application of oil and butter on the infant's body and using scissors to cut off the constricting bands. In this case, care after the surgery included proper dressing on the sited surgical wound, administration of antibiotics, as well as counselling, and support for the young woman. The management should be timely and involve a lot of practitioners where penile strangulation occurred so as not to lead to things such as gangrene or amputation, involvement of Psychiatric department is key as they prevent repetition.

**Introduction**

Penile strangulation is a rare urological emergency that occurs when objects become trapped around the penis. This condition is infrequently seen in urology, and instances involving foreign objects are particularly uncommon. Typically, penile strangulation happens when individuals use rings or similar items to achieve prolonged penile arousal for sexual gratification [1]. Common objects involved include heavy metal rings, hammer heads, plastic bottle necks, sprockets, and plumbing cuffs, as documented in the literature [2]. They exert pressure against the penis thereby limiting blood and lymphatic flow resulting to strangulation. It is important to remove the constricting object immediately and re-establish blood flow because delay in treatment can lead to irreversible destructions that are for instance manifested by gangrene [3,4]. Timely intervention is critical, as delays can lead to serious complications like gangrene and potentially necessitate amputation [5]. Prompt decompression is

essential to save the penis, and tools such as jumbo metal cutters, along with the assistance of colleagues, may be needed, especially if urologists and surgeons are unfamiliar with these methods. Often these patients have underlying psychiatric disorders [3,6]. This case report details the presentation, psychiatric aspects, and management of a 60-year-old male who arrived at the emergency surgery department at midnight Lady Reading Hospital with penile strangulation caused by a plastic bottle neck.

**Case presentation****Patient's description**

A 60 year old male patient reached the casualty surgery department of Lady Reading Hospital with a plastic bottle neck which was tied around the base of his penile shaft.

### Case history

The patient complained of the following symptoms for the past 12 hours, swelling, pain, difficulty in urinating. He suffers from bipolar disorder and has had instances of mania that is highly attributed to reckless actions and decisions. He admitted to placing the neck of a plastic bottle round the penis during a manic phase for the purpose of improving sexual satisfaction and this resulted into the above mentioned state.

### Physical examination results

When examined physically, the penile shaft was considered to be congested by oedema with the signs of tissue ischaemia proximally to the narrowed region. At the time of admission, the patient had no features of the underlying disease, the vital signs were normal.

### Results of pathological investigations

As to pathological examination, no specific studies were described when the clinical course ensured that the lumen diameter was severely narrowed with ischemic alterations.

**Treatment plan:** Acute interventions primarily aimed at alleviation of the constriction to allow proper blood flow and forestall sequelae. Surgical options considered included:

Manual compression and lubrication.

Aspiration.

Cutting tools.

Emergent surgical intervention.

**Expected outcome:** The objective was aimed at eliminating the impotence and prevent further deterioration of the condition and development of gangrene of the penis.

**Actual outcome:** The postoperative treatment included dressing of wound, the use of antibiotics to control infection, and the use of analgesics to control pain. He was referred for further psychiatric management of both his bipolar disorder and to prevent further such acts in the future.



**Figure 1:** Clinical image.

**Table 1:** Grades of penile strangulation ranging from edema to necrosis.

Grade	Description
1	Edema of the distal penis
2	Injury to penile skin constriction of corpus spongiosum without any urethral injury. Edema of distal penis with decrease sensation
3	Injury to skin and urethra but no urethral fistula. Loss of distal penile sensation
4	Complete division of corpus spongiosum leading to urethral fistula and constriction of corpus cavernosa with loss of distal penile sensation
5	Gangrene, necrosis or complete amputation of the distal penis

### Discussion

The instances of penile strangulation as aforementioned are rare, nevertheless, they have been witnessed all over the globe. Up to the present time only about 60 cases have been described in the literature and the first one was described by Gauthier in 1755 [7,8]. If left untreated, this clinical emergency can produce marked vascular and mechanical trauma to the penis including features of loss of penile sensation, ischemic skin necrosis, urethral injury or rupture, urethra cutaneous fistula up to penile amputation [9]. Bhat et al in 1995 offered a classification of penile incarceration which he divided to five grades namely edema to necrosis [10].

As per the classification, our case fell upon Grade 2. It was established that early intervention is highly crucial when it comes to penile entrapment to get the best result. The treatment modalities are determined by the extent or nature of the constricting material and any distal edema done. This case is an example of an object that can be removed simply enough, without causing harm - a plastic ring: However metallic objects are rather hard and bulky, and hence very challenging to be removed using tools such as chisels, saws, or cutters [7]. These approaches have been illustrated in the literature in one way or the other [9-11]. If one places an object around the penis when the penis is erect, that object will be harder to remove than when the penis is flaccid. In such cases, it's possible to insert a string or a wire through the object and around the penile skin and packing gauze which enables the object to slide off easily. Another way in which aspiration of corporal blood can be of help in this process is as follows. Thick objects are particularly challenging for which normal surgical instruments may not be adequate. The procedure can be done with the help of pliers or a jumbo cutter as was described in one of the cases; this helps reduce pressure causing edema and helps to prevent complications that can damage the penis [1]. In severe instances there may be need to perform surgical correction of the urethrocutaneous fistula [10]. The worst complication of this condition that one can develop is auto amputation [1].

### Conclusion

Penile strangulation is a rare but serious condition requiring prompt medical attention. This case highlights the importance of a multidisciplinary approach, involving both surgical and psychiatric care, to manage the acute condition and address underlying psychiatric issues. Awareness and timely intervention can prevent severe complications and improve patient outcomes.

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