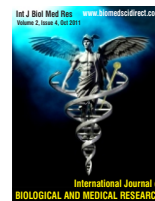


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### Case Report

## Acute penile incarceration injury caused by plastic bottle neck.

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#### ABSTRACT

We report a case of self inflicted acute penile incarceration caused by plastic bottle neck of 14 hours duration in a 46 yr old man. We retrieved the bottle neck with the help of domestic device and thus prevented the further complications. The literature regarding occurrence, mechanism and management of this entity is discussed.

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### 1. Introduction

Penile incarceration, tourniquet and strangulation injuries are known to occur in adults as well as children. Penile incarceration from metallic and non-metallic objects has been reported throughout the world since 1755. Patients present with various grades of penile injury. The treatment varies with the grade at presentation. We report a rare case of self inflicted acute penile incarceration caused by a plastic bottle neck.

### 2. Case Details

A 46 yr old man presented to us with a plastic bottle neck placed at the root of the penis for attempting masturbation. The man came after 14hr with gross penile edema and impaired penile sensation distal to the constriction (Figure 1). The nature of the plastic bottle neck was such that an attempt at cutting the device was difficult. We retrieved the constraining device by cutting it by soldering gun (used for electrical soldering by electrician). Cuts were taken at two places – 3 and 9 o clock positions. The only hurdle was heat generated during the soldering, which was overcome by intermittent soldering and pouring cold normal saline in between.

Patient had smooth post-procedure recovery. Patient had normal erection, masturbation, sexual function and micturition with no sequel of urethral stricture at 6 month follow up.

### 3. Discussion

Penile incarceration from metallic and non-metallic objects has been reported throughout the world since 1755. The largest series reported is by Dakin in 1948 [1]. Men present between ages 15 and 56. Various metallic strangulating objects like wedding ring, metal plumbing cuff, bullring and hammer head have been reported in various literatures.[2,3]

Our patient was 46yr old man with penile incarceration, due to plastic bottle placed at the root of the penis of 14hr duration. There was a gross penile edema with colour changes up to the root of penis and an impaired penile sensation. Hence it was categorized as Gr 1 [8].

Management of such condition can be a challenge to the treating surgeon. Treatment of urinary retention is a preliminary step. If the urethra is intact, Foley catheter is recommended for Gr 1 and 2, while suprapubic catheterization is recommended for Gr 3 to 5 traumas [8].

There was no micturition disturbance in our patient.

Treatment of penile incarceration can generally be divided into four groups –

1. The string technique and its variants, without aspiration of blood from the glans.
2. Aspiration technique.
3. Cutting devices.
4. Surgery.

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Bucy first utilized the string technique in 1968 to remove metal ball bearing device from an incarcerated penis. The string technique (string cord, umbilical tape) with glans drainage has been successfully employed for Gr 1 to 3 injuries. [1]. Aspiration technique utilizes multiple punctures of the distal penis with 18G needle in to the subcutaneous tissue to drain lymph with subsequent decompression [1]. Surgery is reserved for Gr 4 and 5 injuries with wide tissue debridement partial thickness skin grafts. [4]. When infected gangrene of the penis sets in, partial or total amputation of the penis is done. Long term follow-up with micturiting cystourethrogram (MCU) and uroflowmetry is necessary.

In our case we used a domestic device which was available at that time of emergency. With the help of which the constricting device was retrieved successfully and further complications prevented. We followed up the case at 2 and 6 months without any complications.

#### 4. Conclusion

Penile incarceration from plastic bottle neck is a rare presentation and requires urgent intervention to prevent complications. The technique used for retrieval of constricting device is unique.

**Figure 1: Picture showing acute penile incarceration with plastic bottle neck at its root**



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