

A case of penile strangulation after placement of metallic rings

Iraklis C. Mitsogiannis, Nikolaos Kostakopoulos, Lazaros Lazarou, Evangelos Karagiotis
Second Department of Urology, National and Kapodistrian University of Athens, Medical School, Athens, Greece

Abstract Penile strangulation following placement of metallic rings is a rare clinical entity that needs urgent attention to avoid potentially severe clinical consequences. Careful handling and occasionally a multidisciplinary approach are the keys to a successful outcome.

Keywords: Constriction, penis, rings, strangulation, trauma

Address for correspondence: Prof. Iraklis C. Mitsogiannis, Second Department of Urology, Sismanoglio Hospital, 1 Sismanogliou Street, 15126 Maroussi, Athens, Greece.
E-mail: imitsog@med.uoa.gr

Received: 29.12.2017, **Accepted:** 10.02.2018

INTRODUCTION

Penile strangulation due to placement of constricting devices is a potentially serious situation. We herein present a case of penile strangulation after placement of metallic rings at the base of the penis which were removed using bolt cutters.

CASE REPORT

A 32-year-old male patient presented to the accidents and emergency department with penile pain and edema, 72 h postintercourse, during which he had placed 5 metallic rings at the penile base for enhancement of his sexual performance. Following intercourse, the patient failed to remove the rings.

On clinical examination, the penis was found to be bruised, edematous, and painful with noticeable paraphimosis [Figure 1]. The rings could be easily recognized at the base of the penis apparently obstructing the urethra, as

the patient reported painful dribbling urination for the last 24 h.

Laboratory tests, including whole blood count and biochemistry, were sent off revealing a markedly elevated (15.000) creatine phosphokinase (CPK). The patient was commenced on systemic antibiotics combined with analgesics. Removal of the metallic rings was achieved 2 h later, under regional anesthesia (20 ml of diluted lidocaine injected at the base of the penis), using bolt cutters [Figures 2 and 3]. A 16F Foley catheter could then be inserted emptying 500 ml of clear urine from the urinary bladder [Figure 3]. The paraphimosis was also resolved. The patient remained hospitalized for 3 days and had an uneventful course with penile edema subsiding and CPK returning to normal. On discharge, he was prescribed a short course of oral antibiotics and was instructed to be regularly followed up in clinic. This proved to be difficult, due to his occupation (sailor), and he was mainly interviewed by phone, reporting normal voidings and also maintenance

Access this article online	
Quick Response Code:	Website: www.urologyannals.com
	DOI: 10.4103/UA.UA_195_17

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

For reprints contact: reprints@medknow.com

How to cite this article: Mitsogiannis IC, Kostakopoulos N, Lazarou L, Karagiotis E. A case of penile strangulation after placement of metallic rings. *Urol Ann* 2018;10:222-4.

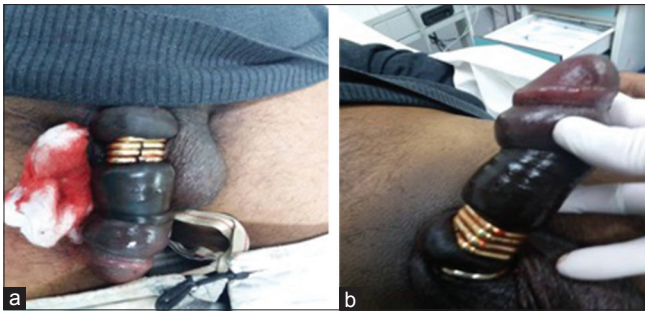


Figure 1: (a and b) A set of metallic rings placed at the base of the penis

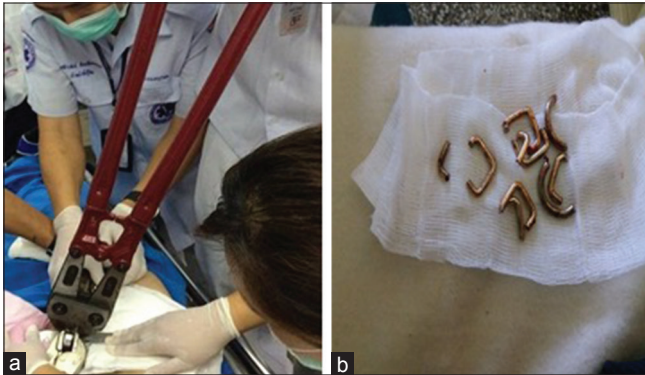


Figure 2: (a and b) Removal of the metallic rings using bolt cutters



Figure 3: (a and b) End result following removal of the rings and insertion of an indwelling catheter

of his erections. Nonetheless, he managed to attend the clinic twice (at 2 and 9 months posthospitalization). At the 9-month visit, he was submitted to a penile duplex ultrasound combined with intracavernous injection test; penile systolic blood flow proved to be normal during ultrasound and an erection could be achieved 15 min following alprostadil injection. The International Index of Erectile Function-5 (IIEF-5) was 22, indicating that the patient retained a normal erectile function. Furthermore, his flow rate was 20 ml/s with no postvoid residuals detected.

DISCUSSION

Penile strangulation is an uncommon clinical situation, often encountered following self-placement of constricting

objects for enhancing sexual stimulation or by psychiatric patients.^[1-4] Due to edema, the device often becomes irremovable after intercourse, thereby constricting the base of the penis. A wide variety of constricting devices have been described in the literature, from thin rings to heavy hammerhead,^[5] with the metallic rings being the most commonly used.^[3] Patients using this practice may present with penile ischemia varying from discoloration to ischemic necrosis and autoamputation of the penis,^[6,7] often accompanied by urethral injury.^[8] Hence, this situation should be regarded as a urological emergency requiring prompt removal of the constricting object. Several methods for removing the object are cited in the literature, namely cutting techniques, string techniques, penile aspiration, and surgical excision of penile skin and Buck's fascia.^[4] The choice of method depends on type, size, incarceration time, injury grade, and availability of equipment.^[9] Removing the object can be challenging and sometimes necessitates instruments unavailable in the operating theater.^[9] In our case, the rings were removed using bolt cutters provided by the staff of the technical department. Handling was undertaken with great care to avoid further damage to the underline penile skin. The patient did well after the procedure and had no clinical consequences in the long term, such as urethral stricture or erectile dysfunction, which might be a concern in cases of prolonged ischemia. This was proven by the penile duplex ultrasound, in combination with intracavernous injection of alprostadil, and the IIEF-5 score which were used to ensure that patient's erectile function remained normal as reported.

CONCLUSION

Penile strangulation resulting from constricting devices is a rare clinical condition which needs urgent attention to avoid potentially severe complications. In many instances, a multidisciplinary approach and instruments not available in the operating theater may be required. Careful and individualized handling during the procedure ensures a successful outcome.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

REFERENCES

1. Detweiler MB. Penile incarceration with metal objects – A review of procedure choice based on penile trauma grade. *Scand J Urol Nephrol* 2001;35:212-7.
2. Ivanovski O, Stankov O, Kuzmanoski M, Saidi S, Banev S, Filipovski V, *et al.* Penile strangulation: Two case reports and review of the literature. *J Sex Med* 2007;4:1775-80.
3. Silberstein J, Grabowski J, Lakin C, Goldstein I. Penile constriction devices: Case report, review of the literature, and recommendations for extrication. *J Sex Med* 2008;5:1747-57.
4. Singh I, Joshi MK, Jaura MS. Strangulation of penis by a ball bearing device. *J Sex Med* 2010;7:3793-7.
5. Perabo FG, Steiner G, Albers P, Müller SC. Treatment of penile strangulation caused by constricting devices. *Urology* 2002;59:137.
6. Nelius T, Filleur S. Self-inflicted penile strangulation. *Aktuelle Urol* 2010;41:64-6.
7. Hussain HM. A hair tourniquet resulting in strangulation and amputation of penis: Case report and literature review. *J Paediatr Child Health* 2008;44:606-7.
8. Singh I, Ansari MS, Nabi G, Panesar G. Chronic progressive penile strangulation with urethrocutaneous fistula – Report of a case. *Indian J Surg* 2003;65:191-2.
9. Sathesh-Kumar T, Hanna-Jumma S, De Zoysa N, Saleemi A. Genitalia strangulation – Fireman to the rescue! *Ann R Coll Surg Engl* 2009;91:W15-6.