Case Report

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Penile strangulation due to metallic ring: a surgical emergency

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ABSTRACT

Penile strangulation is a very rare but most serious clinical condition. It usually results from positioning of any foreign object at base of penis for sexual stimulation. If urgent intervention is not done this may lead to serious complications even death? In this study usual common method were unsuccessful therefore partial penectomy was done.

Keywords: Penile strangulation, Constricting device, Penectomy

INTRODUCTION

Penile strangulation is a condition in which a foreign material compresses the penis, resulting in penile enlargement due to a circulatory disturbance. Penile strangulation is an unusual clinical condition and the consequences can be severe. The commonest presentation is urinary obstruction. The delay in seeking medical help results in aggravation of complications, thus making the task more difficult for emergency physicians. Hereby we report a case of patient with metallic ring inserted for sexual pleasure in our emergency department.

CASE REPORT

A 48 year old male presented to our surgical emergency with a self-inserted metallic ring at base of penis with gangrenous penis. Metallic ring had positioned 6 days back for sexual pleasure and lead to gangrenous changes slowly and gradually. Multiple trials were attempted to remove the ring using lubricant. There was no history of mental illness or any substance abuse. On examination, the patient appeared rather calm though in pain. General assessment was normal including mental status. Examination of the genitalia revealed a strangulating

metallic ring of diameter 2.5 cm and width 8 mm fixed tightly at the peno-scrotal junction with gangrenous changes and loss of all sensations (Figure 1). There was no vascularity and no bleeding upon pin prick. Patient was treated outside and suprapubic needle aspiration was done for urinary retention.



Figure 1: Preoperative - gangrenous penis with metallic ring.

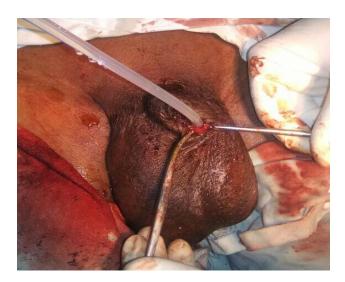


Figure 2: Postoperative-penectomy with Foley's bulb in situ.



Figure 3: Amputated penis with metallic ring.

Treatment

After evaluation, penile amputation was done under spinal anaesthesia in emergency OT with removal of metallic ring and proximal stump was found to be around 2 cm. Necrosed skin were removed, both corpora cavernosa transfixed, haemostasis achieved, urethra spatulated and 16 French Foley catheter inserted in urethra and bulb inflated on flow of urine (Figure 2) and (Figure 3). Since it was an emergency procedure therefore decision was taken to perform perineal uretherostomy at a later date.

DISCUSSION

Most reported cases of penile strangulation involve the placement of the metallic rings and devices for sexual gratification. Penile strangulation by a metal ring is a rare but serious trauma. Since their first descriptions in 1755, there have been approximately 60-120 reported cases. There have been reports of use of several constricting devices. It occurs usually in patients with psychiatric

disorders with symptoms of self-aggression. The reason for this voluntary gesture is either auto-mutilation or auto-eroticism or even the desire to improve sexual performance by creating sustainable penile rigidity.³

The strangulating objects in paediatric and adult age groups differ considerably.⁴ In our case it's a 48 year old male with 6 children. Adolescents as young as 13 years to geriatric cases as old as 81 years have been reported.² In the infants, strangulation injuries have been reported to be caused by maternal hair (toe tourniquets syndrome) another case was reported in child who tied a thread around his penis to get rid of primary nocturnal enuresis

Metal objects are relatively difficult to remove and to cut the metal objects is the most common method documented. However, in real practice, most medical facilities are not equipped with appropriate cutting machine. Furthermore, cutting the metallic object is a time-consuming process. Cutting tools described are an iron saw, orthopaedic equipment, and a high-speed diamond-tipped dental drill.⁷ Delayed presentations with incarceration, after 72 hours, are more likely to sustain higher-grade injuries.⁵ Presentation is usually delayed due to social stigma. The authors reported that several possible complications can occur including: urinary retention in 50% of cases, urethral fistula, priapism, distal hypoesthesia, ulceration and skin necrosis that may progress to gangrene or amputation of the penis. ⁶ There is a report of death due to penile strangulation and autopsy showing penile strangulation, necrosis of the penis, acute bronchopneumonia. pyelonephritis, and complications depend on the duration and severity of compression. For tight rings, ischemia and necrosis settled early. Management mainly depends on type of constriction device, equipment availability in emergency, clinicians' efficacy and severity of injury.

CONCLUSION

Penile strangulation is a serious surgical emergency. Management must be done promptly and timely otherwise it leads to severe complications such as skin necrosis, gangrenous penis urethrocutaneous fistula, and even may be death is also reported. In young and non-psychiatric patient effort should be made to preserve penis using various mechanical instruments that cuts the metallic objects rather than electrical instruments which itself causes burn or injury. In older and psychiatric patient penectomy may be done to avoid occurrence of same incidence.

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