

Clinical Case Report Series

Pentaethylene-Terephthalate (PET) Bottles: A New Device for Autoerotic Strangulation of the Penis Causing Serious Injury

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Strangulation of the penis by application of constricting devices may present a challenge for the treating physician. Depending on the type of constricting material, special equipment is essential for successful removal of the foreign bodies. We report a new form of constricting device, the neck of a Coca Cola bottle made of Pentaethylene-terephthalate (PET). Particular difficulties were encountered upon removal. Technical details of this case are described. Prior literature on the treatment of penile strangulation is discussed.

KEY WORDS: penis; strangulation; constriction; autoeroticism.

CASE REPORT

A 69-year old man presented to the emergency room at 4 a.m. The man was drunk, wrapped in a blanket, and obviously suffering from pain in the genital area. Removal of the blanket disclosed a grossly swollen dark, red penis completely stuck inside a 1.5 l Coca Cola PET bottle. The man had inserted his penis into the bottle for autoerotic purposes. The bottle neck was located directly at the penile base and penile swelling prevented even a turning of the bottle. Reluctantly, the patient reported insertion of his penis into the bottle more than 10 hr ago. His repeated attempts of removal of the bottle had remained unsuccessful.

By use of a bolt cutter available in the emergency room, the bottle was incised below its neck. Attempts to position the cutter at the bottle neck were unsuccessful. As shown in Fig. 1, bottle necks of PET bottles are equipped with a wide collar and manufactured from particularly firm material. Since the branches of wire cutters open for a maximum width of only 1.5 cm, cutting of a PET bottle neck is impossible. The idea of using a manually operated

or rotating electric steel saw was quickly abandoned in light of the bottle neck's position at the penile base. Next, a diamond tipped dental drill was used after injection of 10 ml of lidocain at the penile base (Huang, Holt, & Philp, 1997). Placement of a protective metal tongue for prevention of injury to the penile skin was not possible. Despite cooling with ice-cold sterile sodium chloride, the drill produced considerable heat in contact with the PET and became quickly wrapped up by the PET material. As a result, it grew blunt and did not cut the bottle neck. After having damaged three consecutive drills, a dentist on duty decided to stop the procedure as no more drills were available.

Finally, use of an electric drill employed by neurosurgeons for opening the skull (Aesculap Elan E) was attempted. Different steel drills rotating at a maximum speed of 20,000 rpm were available. This time incision of the bottle neck at the 12 o'clock position was performed successfully. However, stability of the collar at the bottle neck did not allow to pull the edges apart. Thus, a second incision had to be made in order to remove the bottle neck. Injury to the penile skin due to compression was noted on the entire circumference of the penis but the patient refused any further treatment and left the hospital immediately after removal of the bottle neck. On a telephone call 3 weeks later, the patient reported full recovery of penile outer appearance and function.

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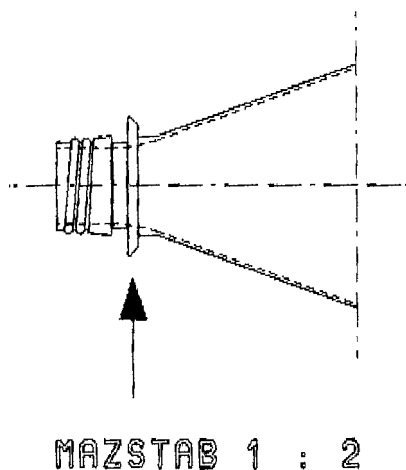


Fig. 1. Side-view of a 1.5l PET-bottle neck. Arrow marks firm collar.

DISCUSSION

Placement of constricting devices around the penis for autoerotic purposes or increase of sexual performance represents a well-known challenge for urologists. While serious complications, such as vascular injury, gangrene or urethral damage have been reported, recovery is uneventful in most cases after successful removal of the strangulating object. Removal of various metallic and non-metallic ring-shaped foreign bodies has been described in the literature. Since only a minority of cases have been published, information regarding the best handling and special tricks are frequently distributed by personal communication. The tools for removal reported to date include bolt cutters, Dremel Moto-Tool Kit, Anspach cement eater, hammers, portable glass saws, and dental drills (Greenspan, 1982; McGain & Freedman, 1999; McLaughlin & Coyner, 1989; Perabo, Steiner, Albers, & Müller, 2002; Snoy, Wagner, Woodside, Orgel, & Borden, 1984). In addition, use of packing cords or silk bands for compression of the penis distal from the strangulation has been proposed (flat-string technique) (Vahasarja, Hellstrom, Serlo, & Konturri, 1993). To call the fire brigade in case of a lack of necessary resources for foreign body removal may be a reasonable approach (Kore & Blacklock, 1996). Fire brigade crews are usually equipped with the necessary tools.

To our knowledge, this is the first report of a penile entrapment in a PET bottle. PET-material is utilized for production of medical implants and is non-toxic in contact with human skin or tissue. Rigidity of the material is

extremely high, especially in bottles made for recycling purposes. As described here, stability of the collar at the bottle neck poses particular problems when incision is necessary in case of penile strangulation. While bolt cutter branches do not open up wide enough, diamond tipped dental drills grow blunt by the heated PET material. Fortunately, in our case, the special drill designed for opening the skull was available from the department of neurosurgery.

No psychosocial assessment of patients presenting with strangulating devices has been reported to date. It seems remarkable, however, that the penile width even in the flaccid state exceeds the standard diameter of the bottle opening. This diameter is 22 mm worldwide. In a Caucasian male, penile width in the flaccid state is 28.7–30.8 mm at the base and 30.1–30.2 mm at the glans (Schneider, Sperling, Lümmer, Syllwasschy, & Rübber, 2001). Manipulation of a flaccid penis into a bottle neck must, therefore, require some effort.

In conclusion, equipment with various tools is essential for successful removal of different forms of strangulating objects. According to our experience, a PET-bottle neck is a particular challenge. Although serious sequelae of penile constriction are rare, psychologic or psychosexual assessment of patients performing strangulation of the penis appears warranted. Unfortunately, our patient refused any further assessment.

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