CASE REPORT

Successful removal of a penile constriction wedding ring in a rural area

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Background. Penile strangulation is a rarely described medical emergency. Removal of the strangulating object is challenging, with a lack of proper guidelines.

Objective. To describe the challenges faced during an attempt to urgently remove a metal object (wedding ring) constricting an erect penis. **Method.** We report a case of penile strangulation with a wedding ring in an adult man who presented at Van Velden Hospital casualty department, Limpopo, South Africa, and review the related literature.

Result. The ring was successfully removed using an aspiration technique (via a pink needle).

Conclusion. No proper guidelines exist for the treatment of this condition, so the 'best method' is the one with a successful outcome.

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Penile strangulation has been reported across all age groups. In children, strangulating materials may be placed on the penis as treatment for enuresis and incontinence, and as a punitive measure for masturbation. In adults, it is done mainly for erotic reasons. ^[1-3]

We report a case of a strangulating penile ring and the challenges faced during attempts at removing it.^[1-3]

Case report

A 28-year-old man presented to the casualty department of Van Velden Hospital, which is in a rural part of Limpopo Province, South Africa, accompanied by his mother. His penis was severely swollen and blue, and constricted with a ring (wedding ring) at the middle section. The patient reported that he had applied the ring 4 hours previously for erotic reasons, on the recommendation of friends. His wife had delivered 2 weeks ago by caesarean section.

The penis was erect and blue (Fig. 1) and the patient was in severe pain. His vital signs were normal.

The patient was immediately taken to the casualty theatre. We first attempted to use the string method^[2] to remove the ring, with the patient under sedation with ketamine. However, this failed because of excessive swelling. A second attempt at removal was made using an orthopaedic oscillating saw. The ring proved too wide and strong, with limited space due to swelling.

An attempt was then made using an aspiration method. [1] Multiple puncture aspirations were applied with a 20 mL syringe and a pink needle. The oedema subsided and the ring was successfully removed (Figs 2 and 3). The patient was admitted and treated with broad-spectrum antibiotics and analgesia. Within 3 days he had recovered completely and was discharged (Figs 4 and 5).

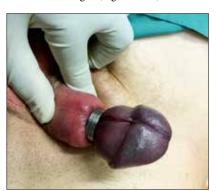


Fig. 1. Erect penis with ring applied.



Fig. 2. Ring removed.

One month later, the patient was reviewed as an outpatient. He reported full recovery.

Discussion

Penile strangulation is a rare emergency, but occasionally occurs on a worldwide basis.^[4,5]



 \underline{F} ig. 3. Bloody penis with oedema subsided.



Fig. 4. Healed penis.



Fig. 5. Puncture wounds.

Bhat *et al.*^[3] presented an original classification for penile strangulation, as follows:

- I. Distal oedema only
- II. Distal oedema, skin and urethral trauma, corpus spongiosum compression, decreased penile sensation
- III. Separation of corpus spongiosum, urethral fistula, corpus cavernosum compression, no distal sensation
- IV. Gangrene, necrosis, or distal penile amputation.

A variety of techniques are available to deal with this emergency:

- · String technique
- Cutting technique (may involve non-medical equipment and personnel) $^{[3,4]}$
- · Aspiration technique
- Surgical techniques (including amputation).^[5]

Conclusions

Aspiration of blood was an effective method for the removal of a wedding ring strangulating a penis that had been applied for erotic purposes. Should it be considered as the method of choice? The doctor should decide on the removal method depending on the case, the settings and available equipment.

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