



Functional medicine

Strangulation of the penis by a metal ring: An uncommon accident in a child



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Introduction

Strangulation of the penis by a metal ring is not common in pediatric urology.¹ However, it is practiced by adults in order to increase their sexual pleasure: auto-erotic stimulation. Few people with psychiatric trouble can also happen to put a metallic ring on their penis.² Strangulation result in the reduction of distal blood flow, edema, ischemia and even in gangrene when the appropriate care is not taken urgently.¹ This is a case report about a 10-year-old boy with a strangulated penis for 48 hours and we describe the method of treatment.

Observation

A 10-year-old boy in third grade was admitted to the Lomé-Commune Regional Hospital Center (RHC) for penis basis strangulation for 48 hours. The child put a ring at the basis of his penis out of curiosity and the parents have realized it only 48 hours later. They tried to remove it at home but could not.

The child is the elder of three healthy siblings. He has never been hospitalized and carried no physical defects.

At admission, the temperature was 37° 5C, the blood pressure: 110/70 mm Hg, pulse rate: 98/minute. The conjunctives were well coloured and not icteric. The child was fully conscious, with a

Glasgow scale at 15 and a eupnoea breathing.

A ring of about 3 cm in diameter strangulated the basis of the penis with a large edema. Fortunately, the skin is still alive, but less sensitive due to edema (Fig. 1). There was no retention of urine. The other apparatus were normal. We used 10 cc syringe to perform puncture-aspiration of the glans under general anesthesia in order to reduce the edema. Lubrication of the ring was then performed using red povidone iodine. The extraction was done by progressive decompressions on the distal part (Figs. 2 and 3). Postoperatively, the patient was treated with clavulanic acid and amoxicillin at 500 mg twice daily and morniflumate suppository 400 mg twice daily. Due to a lack of financial means, the Doppler echo of the penile vessels which should help to assess the state of the penile vascularization was not realized. He was referred to a clinical psychologist who, after his examination, recognize that it was an isolated act.

The postoperative was marked by a total melting of the edema on post-operative D4. The patient was thus discharged. The clinic follow-up one month after was good: no erectile or urinary trouble were noticed.

Discussion

Penis is so delicate and sensitive that any minor injury may cause serious discomforts. Any penile trauma should be managed urgently in order to avoid complications: urinary retention, urethral stricture, urethral fistula, skin ulcerations, priapism, and gangrene of penis.¹ The strangulating object differ one from the other depending on the patient, whether a child or an adult.

In pediatric patients, the common cause of strangulation is hair tourniquet syndrome where penis is wrapped by human hair especially in circumcised children. Another predisposing factors are: mental retardation, enuresis and low socio-economic status.³ Other causes in child population may be child abuse and wrapping the penis with thread to prevent enuresis. Children can also sustain such injuries out of curiosity⁴ as in our case. Adults are often self-strangulated by a variety of metallic and non-metallic objects

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Fig. 1. Metallic ring at the basis of the penis.



Fig. 2. Penis after metallic ring removal.



Fig. 3. Metallic ring removed.

encircling device that cannot be removed with sequential compression. Our patient benefited from the aspiration technique successfully.

Conclusion

Penile strangulation by a ring metal is uncommon in pediatric patients. When the patient has gone through a clinic care on time, the treatment will be easier with good prognosis. Attention needs to be paid for children genital organs.

Appendix A. Supplementary data

Supplementary data related to this article can be found at <https://doi.org/10.1016/j.eucr.2018.02.012>.

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used for fun, erotic purposes or to prolong erection.²

The choice of method to remove the encircling objects depends on the type, on the size and on the time incarceration occurred. Prompt diagnosis and urgent treatment are required to avoid eventual complications such as ischemic necrosis and auto amputation.¹ Treatment for penile incarceration can generally be done in four methods⁵: the string technique and its variants with or without aspiration of blood from the glans; aspiration technique; Cutting devices technique; and Surgery technique.

Surgical technique is reserved for the advanced grades according to the classification of Bhat Al et al. who has graded such injuries in five types according to increasing severity (Grades IV and V) [5]. The cutting technique is often the first method to cut off an