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Urological Surgery

Strangulation of the Verge by Plastic Ring

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Abstract Case Report

We report the case of a 73-year-old Parkinsonian patient, admitted to the emergency department of the Moulins yzeure hospital center, for penile lymphedema evolving for 7 hours after the voluntary placement of the rod in the neck of a plastic bottle to urinate in. The removal of this ring was immediately performed under general anesthesia in the OR after several attempts under local anesthesia that failed. Seven days later, the patient showed a marked improvement with regression of the skin signs, the skin was more supple and less infiltrated. At the exit the patient was programmed for a cold posthectomy. Through this observation and the data of the literature, we specify the management of this pathological situation and the associated complications.

Keywords: Plastic rings, penis strangulation, metal rings.

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I. INTRODUCTION

Strangulation of the penis is a rare incident. Easily diagnosed, it requires thinking about the technique of removing the ring and repairing the damage. This damage is potentially serious because of the urinary skin or sexual complications. We report a case of penile strangulation by the neck of a plastic bottle without urethral or sexual complications.

II. OBSERVATION

Mr F. J, 73 years old, followed for parkinson's for 10 years, was admitted to the emergency department for pain and edema of the penis evolving for 7 hours. Clinical examination showed a plastic ring of a bottle at the base of the glans gland and a large downstream lymphedema with no signs of ischemia or penile necrosis.

The diameter and length of the shaft were 4 cm and 13 cm, respectively. The skin next to the ring was deeply damaged and damaged (Figure 1). There is no retention of urine or necrosis of the glans gland. The removal of this ring was immediately done under general anesthesia. The gesture consists of a double section of the ring with a cutter. At the removal of this ring the corpora cavernosa were normal in appearance and without spongy lesion. The shaft was maintained at the zenith and a compression bandage was put in place after stripping the skin lesions, thus applying an ice bladder to facilitate lymphatic drainage.

Seven days after the neck was removed, the swelling of the penis had significantly decreased in volume and the skin was more supple and less infiltrated (Figure 2). It was decided to apply fusidic acid twice daily with wound infection treatment to improve the quality of the penile skin.



Figure 1: Image en preoperatorie a (H7)



Figure 2: Image postoperatorie (J7)

III. DISCUSSION

Strangulation of the penis by ring is encountered in particular in psychologically unbalanced patients [4]. The motive for this voluntary act is either self-mutilation [4, 6] or self-erotism or even the desire to improve sexual performance through a more lasting penile rigidity [7]. Many devices are blocked at the base of the shaft. It can be metal rings (ring, curtain ring, keychain...) or non-metallic rings (plastic bottle neck...) [6].

Strangulation of the penis is manifested early by edema that makes it impossible for the patient himself to remove the ring from the penis in the first few hours. This is due to the rapid interruption of venous and lymphatic circulation in the skin. The subsequent evolution will depend on the severity of the obstruction and the speed of the management.

For greenhouses rings, ischemia and necrosis settle early [4, 7]. This is observed in young patients who seek to maintain a prolonged erection by the use of greenhouse rings compressing the whole shaft [7]. The ischemia of the penis is absent. Secondarily a lymphedema of progressive aggravation at the level of the penile skin, giving in the long term a cardboard and belated elephantiasic appearance [8]. Our patient did not see anyone until 7 hours into the penile lymphedema.

Treatment must be urgent [5]. The first step is to remove the compressive material often under local anaesthesia. The technique used depends on the hardness and shape of the ring. For thin and narrow rings, the section is usually easy, made with cutting pliers. On the other hand, this is difficult for thick and/or wide hard rings that cannot be gripped by cutting

pliers [6]. In these cases, it is recommended to drain the stagnant blood in the penis by incision or puncture of the glans gland followed by compressive winding of the penis by a silk thread on which the ring is gradually slipped [3, 5, 9].

The second stage involves debridement of the ischemic and necrotic banks of the wound followed by a careful examination of the urethra looking for a fistula especially in the presence of deep ulceration [6]. The placement of a suprapubic catheter is necessary when there is a urethral fistula or urine retention [1, 11]. Amputation of the penis is necessary in case of penile necrosis. It is carried out one to eight days after the removal of the ring, in order to wait for possible recovery [4, 7].

Treatment of early-stage lymphedema involves skin care and lymphatic drainage with compression bandage [10]. At a late stage of skin sclerosis (elephantiasis), the treatment consists of resection of the sclerotic tissue followed by a plasty of the shaft sheath [8].

Associated urethral lesions are often dirty, contused or shredded banks and sometimes with loss of substance, suture is not possible and should not be attempted [2]. It is then necessary to avoid aggressive maneuvers of urethral mobilization or extensive trimming of the spongy tissue, and to prefer a drainage by supra-catheterpubic followed by secondary uretrocutanee fistula repair When the skin becomes of good quality and in the absence of sepsis [2].

Psychological and sexological management is essential in these patients, especially in those suffering from a psychiatric imbalance, and when there is a serious complication, amputation or elephantiasis of the penis.

IV. CONCLUSION

Strangulation of the penis by ring is diagnosed in psychologically and sexually unbalanced patients. Necrosis and Elephantiasis of the penis are the most serious complications, The urgent removal of the ring is the first therapeutic step, Subsequent treatment must be adapted according to the associated lesions and their evolution and systematically involves psychosexological management.

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