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Original Article

Treatment of Penile Strangulation Due To Metallic Objects at Surin Hospital

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Abstract

Objective: To report the management of penile strangulation caused by placement of metal constricting objects.

Method: From 2005 to 2015, there were 3 patients presenting with strangulation of penis from metal constricting objects, including nut, ring and pipe. All objects were removed from patients without complications.

Conclusions: We propose a three-step process: Provide general anesthesia; protect the penile shaft with brain spatula while fixing the constricting object with a gripping lock; and use proper cutting devices.

Keywords: Penile strangulation, metal constricting object, management

INTRODUCTION

Penile strangulation is an unusual clinical condition that was first reported in 1755 by Gauthier¹. Since then, approximately 120 cases have been reported in the literature worldwide². Various metallic and nonmetallic devices have been placed in, on, and around the penis to increase sexual performance or for self erotic intentions. Nonmetallic and thin objects

are easy to remove but can cause severe injury. Metallic objects are difficult to remove while the injuries they cause are usually less severe. Cutting the metal object is the most common method of removal, although appropriate cutting tools may be difficult to obtain and the process may be tedious with the possibility of iatrogenic penile injury³. In this paper, we present a method of removing such metal objects.

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Figure 1 The cutting procedure: Fix the constricting objects with gripping lock then insert the lubricated Scoville brain spatula beneath the object and cut by iron saw for nut (case 1), wire cutter (orthopedic device) for ring and pipe (case 2, 3).

PATIENTS AND METHODS

At Surin Hospital, from 2005 to 2015, three patients presented to the emergency room with penile strangulation by a metallic nut, metal ring, and a steel pipe. All occurred within a day. After admission, routine laboratory tests were obtained, and patients were sent to the operating theater. General anesthesia was administered. In the lithotomy position, a gripping lock was used to fix the constricting objects, facilitate the cutting procedure. A lubricated Scoville brain spatula was inserted beneath the object, to protect the penile shaft. Various cutting devices, such as an iron saw (hardware tool) for the metallic nut, a wire cutter (orthopedic device) for the metallic ring and pipe, were used. In all the cases, the constricting metallic objects were successfully removed without injury to the penile shaft (Figure 1). After removal of the constricting objects, squeezing the penis in the distal to proximal direction was performed to reduce tissue edema, and a urethral catheter was placed for treating urinary retention. All patients were discharged home without further complications, after a few days of hospitalization.

DISCUSSION

There are many ways of removing objects placed around the penile shaft causing penile strangulation, such as the aspiration method^{4,5}, the cutting method^{6,7} and the degloving operation⁸. The removal procedure should be performed under general anesthesia. However, intraoperative penile erection can occur, as reported in 12 patients among the 7,800 who underwent surgery, where the anesthesia used was general in 3, epidural in 1, and spinal in 8 patients⁹ and may complicate the removal procedure. An association between propofol and priapism has been reported¹⁰. The dose dependent vasodilation caused by propofol has been suggested as the possible mechanism. Therefore, we suggest the use of general anesthesia while avoiding propofol. In the present series of patients we protected the penile shaft by using the

Scoville brain spatula. The device is thin and flexible, and is suitable for insertion beneath the constricting objects. By fixing the constricting objects with a gripping lock, we found it easy to safely cut the metal objects.

CONCLUSION

We suggest the following practical method of removing metallic constricting objects in penile strangulation: Use general anesthesia (avoiding propofol), fix the constricting object, protect the penile shaft and cut the object with appropriate devices.

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บทคัดย่อ **ประสบการณ์การรักษาภาวะวัตถุบีบรัดองคชาตในโรงพยาบาลสุรินทร์**

นายแพทย์ชูสิทธิ์ พานิชวิทกุล

กลุ่มงานศัลยกรรมระบบปัสสาวะ โรงพยาบาลสุรินทร์

วัตถุประสงค์: รายงานวิธีการรักษาภาวะวัตถุโลหะบีบรัดองคชาต

วิธีการศึกษา: ระหว่างปี พ.ศ. 2548 ถึง พ.ศ. 2558 มีผู้ป่วย 3 ราย มาด้วยวัตถุโลหะบีบรัดองคชาต ได้แก่ น็อตตัวเมีย วงแหวน และท่อโลหะ ได้รับการรักษาโดยการดมยาสลบทั่วไป ใช้ brain spatula สอดระหว่าง วัตถุกับองคชาต โดยใช้คีมลือค้ำวัตถุโลหะระหว่างทำการตัดด้วยอุปกรณ์ตัดโลหะ

ผลการศึกษา: ผู้ป่วยทุกรายสามารถเอาวัตถุโลหะออกได้โดยไม่มีอาการแทรกซ้อน

สรุป: ขั้นตอนการรักษาภาวะวัตถุโลหะบีบรัดองคชาต ได้แก่ ขั้นตอนแรก ระงับความรู้สึกผู้ป่วยด้วยการดมยาสลบทั่วไป ขั้นตอนต่อมา ใช้เครื่องมือสอดใส่วัตถุโลหะเพื่อป้องกันการบาดเจ็บขององคชาต และขั้นตอนสุดท้ายใช้อุปกรณ์ตัดโลหะที่เหมาะสมตัดวัตถุ
