

# External Genitalia Entrapment A Case Report

Walid Massoud, Pascal Hajj, Ayman Awad, Joseph Chabenne, Pascal Eschwege, Stéphane Droupy, Yacine Hammoudi, Gérard Benoît

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## INTRODUCTION

External genitalia entrapment (EGE) is a rare clinical entity requiring urgent and efficient management.<sup>(1)</sup> If left untreated, it may result especially in vascular compromise to the external genitalia soft tissue structures.<sup>(2)</sup> Management poses unique challenges to the treating physician through variable presentation as well as the lack of specifically designed treatment options.

## CASE REPORT

The fire brigade brought a 45-year-old schizophrenic man to the Emergency Department with a 5-hour history of EGE in a thick nonexpandable silver ring. He was anxious and in a considerable pain. The glans and the penis shaft had

been cyanosed and enlarged with an obvious swelling of the scrotum and foreskin (Figure 1).

In fact, the patient suffered from a behavioral disorder and in his past medical history, we noted a traumatic colic perforation by a foreign body. This time, the entry had begun with one testis followed by the other one and finished with the penis. The patient had used oil to facilitate the maneuver. On physical examination, he complained of numbness of the glans and the penile dorsal artery pulse was barely perceptible. He had voiding difficulties, but was not in acute urinary retention. Under neuroleptic analgesia, a malleable retractor was negotiated under the ring to safeguard the underlying skin (Figure 2) and the ring was

Urology Department, Bicêtre Hospital, Le Kremlin-Bicêtre, France

Corresponding Author:  
Massoud Walid, MD

CHU de Bicêtre, Department of Urology, 78, rue du général Leclerc, 94275, Le Kremlin-Bicêtre, France

Tel : +33 699 114 939

Fax : +33 145 212 047

E-mail : walidmassoud@yahoo.fr

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**Figure 1.** Cyanosed and enlarged glans with an obvious swelling of the scrotum and foreskin.



**Figure 2.** Malleable retractor negotiated under the ring to safeguard the underlying skin.

cut in 2 places with a diamond-tipped oscillating splint saw. The whole procedure took about 1 hour. After removing the ring, the circulation and the skin color were quickly restored to the external genitalia, which were undamaged. There was an unremarkable change on scrotal ultrasonography. The swelling gradually subsided and the patient was capable of urinating. On the follow-up of 2 and 6 months, the uroflowmetry showed a maximum flow rate around 25 mL/s and the scrotal ultrasonography demonstrated a normal vascularization and trophicity of the testicular parenchyma.

## DISCUSSION

A strangulation metal ring is occasionally encountered in urologic emergencies.<sup>(3,4)</sup> External genitalia entrapment is rarer than penile entrapment, but is a more serious emergency condition, which can lead to infarction.<sup>(5-8)</sup> Various nonmetallic and metallic constricting objects, including bottles, rings, hairs, threads, steel nuts, rubber bands, etc<sup>(3,4,9,10)</sup> are placed on the external genitalia to increase sexual performance or because of autoerotic intentions.<sup>(4,6)</sup> In the worldwide literature, penile entrapment has been reported,<sup>(3-14)</sup> but to our best knowledge, this is the first report of external genitalia entrapment. The main objective in this situation is decompression to facilitate free blood flow and micturition.<sup>(4,6)</sup> Metallic rings rarely cause severe mechanical injuries, but they can lead to severe vascular complications.<sup>(4)</sup> Various procedures have been proposed, including the common metal ring cutter, cutting tang, metal saw, Dremel Moto-Tool Kit, Anspach cement eater, high-speed dental drill, string method, and wrapping by package cord.<sup>(3-5,8-10,13-15)</sup> Removal of strangulating constricting devices requires resourcefulness to perform the removal simply and effectively, and with as little discomfort for the patient as possible. In some cases, a little premedication is helpful; however, only very few patients require general anesthesia.<sup>(4)</sup>

## CONFLICT OF INTEREST

None declared.

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