

Delayed Successful Surgical Repair of Penile Fracture: A Case Report

Ioannis Galanakis^a Konstantinos Adamos^a
Evangelos Spyropoulos^b Stamatios Mavrikos^a

^aDepartment of Urology, Athens Naval and Veterans Hospital; ^bDepartment of Urology, Metropolitan Hospital, Athens, Greece

Key Words

Penile fracture • Surgical repair • Trauma

Abstract

Penile fracture is a very rare urological emergency resulting from traumatic rupture of the tunica albuginea of one or both corpora cavernosa, usually during sexual intercourse. Immediate surgical treatment is the current standard of care with lower risks of late complications, including erectile dysfunction, penile curvature, and tunical scar formation. We, hereby, report an over delayed presentation (23 days) of a penile fracture, which was successfully managed surgically. Our case emphasizes on the fact that there are not any “lost” cases and surgical treatment should always be offered to penile fracture, independently of delayed presentation.

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Introduction

Penile fracture is a very rare or, probably, a rarely reported urological emergency. It occurs after traumatic rupture of the tunica albuginea of one or both corpora cavernosa, due to twisting or bending of the penile shaft during erection [1]. Rupture may extend to the corpus spongiosum and the urethra [2]. Incidence and etiology of penile fracture varies considerably within different geographic areas. In 2002, Eke [3] reported 1,642 cases worldwide with 745 (56%) coming from the Mediterranean region. In Western European countries, the injury

typically occurs during sexual intercourse while in the Middle Eastern countries, the most frequent cause is reported to be forceful manipulation (65%) [4]. The diagnosis is clinical, however, a Doppler ultrasound or an MRI may be useful sometimes. Immediate surgical repair is the current standard of care with lower risks of complications, including erectile dysfunction, penile curvature, and tunical scar formation, compared to conservative management or delayed repair [5, 6].

Here we present an over delayed surgical treatment of penile fracture during intercourse.

Case Report

A 42-year-old patient presented to his local hospital emergency department complaining of penile injury during intercourse. He was admitted to the urology department with the diagnosis of penile fracture and was treated conservatively with ice packs, compression, antibiotics and anti-inflammatory. He was discharged after 9 days and visited a private urologist who confirmed the diagnosis with MRI and consulted the patient to prompt surgical repair.

The patient was operated in our hospital 23 days after the injury. Surgical exploration, after degloving the penis, revealed a 2-cm defect in the left corpus cavernosum, with an associated peri-cavernosal hematoma (fig. 1, 2). The right corpus cavernosum and the urethra were intact. The hematoma was evacuated, and the defect was repaired with a 2-0 vicryl continuous inverting sutures.

The patient had an uneventful postoperative period and was advised to have his first sexual intercourse at 2 months. At 4-month, 12-month and 24-month follow-ups, the patient had no signs of erectile dysfunction, pain or deformity during erection.



Fig. 1. Peri-cavernosal hematoma.

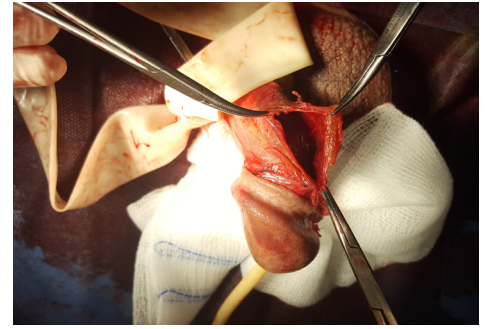


Fig. 2. Evacuation of hematoma revealing a 2-cm defect in the left corpus cavernosum.

Discussion

Penile fracture is known as the rupture of tunica albuginea of the corpus cavernosum while the penis is in the erect condition. The tunica albuginea is among the toughest of body fascias. It measures 2 mm in a flaccid penis and gets thinned out to 0.25 mm during erection [3]. It is considered as a rare urological emergency, rather highly underreported, due to the embarrassing nature of the condition.

Earlier studies favored conservative treatment for the traumatic rupture of the penis. However, due to the 10–30% of patients who, afterwards, experienced penile deformity, suboptimal erections and coitus difficulty, conservative management is the exception than the rule nowadays [7]. The World Health Organization is very clear on that: “all acute injuries to the tunica albuginea ought to be repaired immediately by surgical interven-

tion”. Immediate surgical repair means within the first hours after the trauma. A large multicenter European study showed that delaying surgical intervention results in significantly impaired erectile function [4]. There is important data in the literature; on the other hand, that definitive therapy with excellent results is still possible after a considerable time period passed from the trauma without any increase in long-term complications [8–10].

Our patient presented 23 days after his trauma and, although we considered that long time as a contraindication for surgical repair, we proceeded in the operation. Patient’s perfect condition 2 years after, justified our choice. We were not able to indentify case reports in the literature with such long delay for surgical treatment and consequent successful outcome. That case shows that there are not any “lost” cases and surgical treatment should always be offered to penile fracture, independently of delayed presentation.

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