ACCIDENTAL PENILE FRACTURE CAUSED BY SELF-INVOLVEMENT IN THE ABSENCE OF SEXUAL ACTIVITY: A CASE REPORT

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ABSTRACT

Objective: This study aims to present a case of accidental penile fracture without sexual activity. Case(s) Presentation: A 40-year-old guy was sent to our emergency center nine hours prior to admission with oedema and lack of tumescence on the penis. There were no records of sexual activity or masturbation. The patient was treated for a hematoma and a fracture. The patient raised no complaints during his one-week and two-month follow-up visits after the procedure. Discussion: A urological emergency involving penile fracture is uncommon. It is important to avoid unnecessary delays in obtaining medical help. In the current case study, with urgent surgical intervention, corporal tears were repaired. Recent research recommends prompt surgical treatment of penile fractures, as this appears to be associated with fewer complications and better results. Conclusion: A penile fracture that requires immediate surgical treatment can preserve erectile and voiding function.

Keyword: Penile fracture, urological emergency, surgical treatment.

ABSTRAK

Tujuan: Penelitian ini bertujuan untuk mempresentasikan kasus fraktur penis yang tidak disengaja tanpa aktivitas seksual. **Presentasi Kasus:** Seorang pria berusia 40 tahun dikirim ke pusat gawat darurat kami sembilan jam sebelum masuk dengan edema dan tidak adanya pembengkakan pada penis. Tidak ada catatan aktivitas seksual atau masturbasi. Pasien dirawat karena hematoma dan patah tulang. Pasien tidak mengajukan keluhan selama kunjungan tindak lanjut satu minggu dan dua bulan setelah prosedur. **Diskusi:** Keadaan darurat urologi yang melibatkan patah tulang penis jarang terjadi. Penting untuk menghindari penundaan yang tidak perlu dalam mendapatkan bantuan medis. Dalam studi kasus saat ini, dengan intervensi bedah yang mendesak, robekan badan dapat diperbaiki. Penelitian terbaru merekomendasikan perawatan bedah segera pada patah tulang penis, karena hal ini tampaknya dikaitkan dengan komplikasi yang lebih sedikit dan hasil yang lebih baik.. **Simpulan:** Fraktur penis yang membutuhkan perawatan bedah segera dapat mempertahankan fungsi ereksi dan berkemih.

Kata kunci: Fraktur penis, emergensi urologi, perawatan bedah.

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INTRODUCTION

Penile fracture is a urological emergency. However, it is an uncommon occurrence. Tearing or splitting of the corporal cavernosal body is the most common cause of injury to an erect penis. The most typical presenting signs are a cracking sound followed by pain, rapid detumescence, and enlargement of the penile shaft. In situations of penile fracture, urethral damage should be

suspected, especially if there is a urethral hemorrhage and bilateral cavernosal rupture.² The therapy of choice is a prompt surgical intervention with the closure of the tunica albuginea, which produces satisfactory cosmetic and functional effects. Fracture of the penis, often caused by blunt trauma to the erect penis, commonly occurs during sexual intercourse, especially in positions where the woman is on the top or masturbating using hard materials. The purpose of the current paper is to

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discuss penile fractures that occur without a history of sexual intercourse or masturbation. We outline the case report of a 40-year-old man who was referred to our hospital's emergency department due to a penile fracture.

CASE(S) PRESENTATION

A 40-year-old male was referred to our emergency unit with oedema and loss of tumescence on the penis over a period of nine hours prior to admission. The complaint occurred when the patient experienced nocturnal penile tumescence, causing him to feel itchy and begin to scratch his penis from the tip towards the base of the penis. He had inadvertently applied excessive pressure to the erect penis in the dorsal direction. Suddenly, a "crack" sound was heard while scratching the penis, followed by swelling and sudden detumescence. There was no history of sexual intercourse or masturbation. The patient experienced pain in the penis without any episode of hematuria. A history of hypertension, diabetes mellitus, asthma, and allergies was denied. With a blood pressure of 130/84 mmHg and a temperature of 36.8° Celsius, the patient showed stable hemodynamics. During the physical examination (Figure 1), a large ecchymosis, and a deviated uncircumcised penis were discovered with no signs of meatal blood, and normal testes.



Figure 1. Penis with Eggplant like deformity.

The patient underwent hematoma removal and fracture treatment. The penis was degloved and circumferential sub-coronal incisions were made. Intraoperative findings uncovered a hematoma and tunica albuginea defect. The hematoma was evacuated (Figure 2). Interrupted suture was used to close the tunica defect using 3.0 Vicryl. The skin was closed, and hemostasis was maintained (Figure 3).

The patient's postoperative period was uneventful, and he was encouraged to wait for one to two months after the operation to engage in sexual activity for wound healing and functional recovery of the penis. The patient raised no complaints during his one-week and two-month follow-up visits after the procedure. No scars or sexual dysfunction were mentioned by the patient.



Figure 3. Post operative condition of the repaired penis.

DISCUSSION

The most documented cause of injury involves the unnatural bending of an erect penis during sexual activity or masturbation. A penile rupture occurs when the penis is in an erect state, as the tunica albuginea's tissue becomes thinner and more susceptible to the sudden rise in intracorporeal pressure. Penile fracture is a relatively infrequent condition resulting from blunt trauma to the erect penis.^{1,3}



Figure 2. Intra-operation defect.

Several previous case reports have reported penile fractures due to different mechanisms. Bastianpillai et al., reported the case of a patient with penile fracture who mistakenly forced excessive stress on the erect penis in a lateral direction while asleep.³ Meanwhile, Ge Guangju, et al., reported the case of a patient who experienced genital injuries six hours after sexual intercourse, and Barua SK et al., reported the case of a patient with a history of penile injury during anal intercourse.^{4,5} Unlike the other cases, the case outlined in the current study was caused by trauma that occurred when the patient was scratching his penis during nocturnal penile tumescence.

Nocturnal penile tumescence causes the penis to reach full rigidity despite experiencing no sexual stimulation. The fracture of the penis may have been caused by significant bending while scratching due to the full rigidity of the penis. Despite scratching being a minor form of trauma, in this case, it may have caused significant injury to the tunica albuginea. Clinical findings in our patient showed swelling and hematoma on the penis, causing an eggplant-like deformity, with no signs of meatal bleeding, and normal testes. This was due to a rupture of the tunica albuginea, resulting in a hematoma.

The clinical findings and treatments administered to the patient, in this case, did not differ from a penile fracture caused by general etiology. The penile fracture in our patient could be confirmed by physical examination. Therefore, urethrography was not performed as there was no meatal bleeding. The patient was given analgesics and underwent surgery to repair the penile fracture. Surgery was performed by evacuating the hematoma. Interrupted suture using 3.0 Vicryl was used to close the tunica defect. The results of the surgery were satisfactory in terms of clinical appearance.

A urological emergency involving a penile fracture is uncommon. It is important to avoid

unnecessary delays in obtaining medical help. In the current case study, with urgent surgical intervention, corporal tears were repaired. Recent research recommends prompt surgical treatment of penile fractures, as this appears to be associated with fewer complications and better results.⁵

CONCLUSION

The purpose of this case report is to relate our personal experience with this uncommon and under-reported ailment, as well as to underline the significance of prompt surgical treatment. Penile fractures usually occur due to trauma mechanisms, for example, intercourse, masturbation, or other forms of blunt trauma. However, this case report was not caused by these factors, but rather a minor trauma mechanism. It was imperative to address the emergency immediately in order that the dysfunction could be corrected properly.

REFERENCES

- 1. Taha KM. A typical presentation of penile fracture. Urol Nephrol Open Access J. 2020; 8(2): 42–44.
- Restrepo JA, Estrada CG, García HA, Carbonell J. Clinical experience in the management of penile fractures at Hospital Universitario del Valle (Cali-Colombia). Arch Esp Urol. 2010 May; 63(4): 291-5.
- Bastianpillai C, Wang A, Kumaradevan J, Chitale S. Accidental, Non-masturbatory, Non-intercourse Related, Self-Inflicted Penile Fracture: Case Report and Review of Literature. Urol Case Rep. 2017 Mar 11; 12: 45-46.
- 4. Ge G, Wang H, Chen Y, Li G, Ma L. Complete urethral injury in the penile fracture: a case report and literature review. Transl Androl Urol. 2021 Feb; 10(2): 969-975.
- 5. Barua SK, Pratihar SK, Rajeev TP, Baruah SJ, Bagchi PK, Sarma D, et al. Double penile fracture with complete urethral disruption following anal intercourse: a case report. Int Surg J 2019; 6: 2602-4.