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## A Testicular Trauma by Gunshot: A Case Report

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Abstract: Testicular trauma is a rare medical condition and is classified etiologically as blunt or penetrating. Blunt testicular trauma, mostly are caused by interpersonal violence, sporting injuries and affect males aged 15–45. Our aim is to present a 21 years old, presented to the emergency room with testicular trauma by gunshot wound. Case presentation: A 21 years old male patient, presented to the emergency room of the University Hospital of Trauma with a gunshot wound (suicide). On objective examination, the patient presented with a relatively stable condition: pale, frightened, dry tongue and mucous membranes. On local examination, a bullet hole was found in the radius of the penis (anterior part), with signs of gunpowder burns. Another bullet hole in the perineoscrotal region. The patient underwent emergency surgery and had a coronary artery incision. Result and conclusions: Considering a great ideal trauma of the genitals, the intervention protocol was organized. During his stay in the hospital, the patient was treated completely: antibiotic, liquid, analgesic, sedative, local medication.

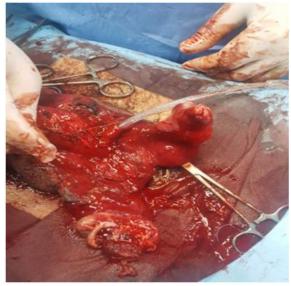
Keywords: testicular, trauma, male

#### 1. Introduction

Genitourinary injury is a rare complication that happened in approximately 10% all of abdominal trauma [1]. Testicular trauma is common in males, especially in those play hard sports or activities. Scrotum and testicules are at high risk of injury in trauma because of their extracorporeal location. Approximately, the incidence of testicular or scrotal injury in a trauma activation is generally considered to be less than 1% [2]. The etiologic factors for a traumatic of testicular trauma can be: a) direct blows with a strong object or with cutting tools; b) vehicle trauma (it is rarer because the penis is a moving organ); c) the fire area is one of the main causes. Bullets (direct fire) are more common because shell fragments or explosives; d) Forced sexual intercourse and coitus errors mainly in adolescents such as: penile fractures or prepuce calcium lacerations; e) self-mutilation in mentally ill people; f) iatrogenic causes: circumcision, urethrocystoscopy, forced use of bursae and urethral catheters of various types [3-5]. The aim of our paper is to present a 21 years old male patient, presented to the emergency room of with a scrotal trauma by a shotgun wound.

#### 2. Case Presentation

A 21 years old patient, presented to the emergency room of the University Hospital of Trauma with a shotgun wound (suicide). On physical examination, the patient presented with a relatively stable condition: pale, frightened, dry tongue and mucous membranes. Blood pressure was 110/60mm/Hg, heart rate was 92 beat/min, full and rhythmic. On local examination, a bullet hole was found in the radius of the penis (anterior part) with dimensions of 1 x 0.5 cm, with signs of gunpowder burns. Penis and scrotum with giant hematomas. Another bullet hole in the perineoscrotal region. Blood flowed from the lips of this hole. The patient underwent emergency surgery and had a coronary artery incision. The skin of the penis was prepared up to the radicular penis, the posterior part. Large corpus callosum hematoma, penile urethral avulsion from pars navicularis to the level of the penoscrotal urethra was found. A sagittal rupture of the left cavernous corpus at a length of 5 cm was found. The destruction of both testicles with exposure of their parenchyma to the wound was seen.



**Figure 1:** Operator intervention for the concrete case.

**Operating Tactics**: Considering a great ideal trauma of the genitals, the intervention protocol was organized. The destructive but found germinal tissue was initially taken and sent for spermogram analysis. This resulted in satisfactory parameters. After storage in the bank of sperm, proceeded with further operative procedure:

- The sagittal laceration of the cavernous corpus was initially sutured along the entire length of the lesion with the 4.0 prolen, as it had previously been flushed with heparin 25000 UI.
- Suturing of all damaged layers (tunica albuginea) with vicryl 3.0 was performed.
- Avulsion of the penile urethra forced us to perform perineoscrotal neo-orificium.
- Finally, the layers were repaired using vicryl 3.0 including tunica vaginalis of the remaining tests and the body of the penis.

During his stay in the hospital, the patient was treated with antibiotic, liquid, pain killers and local medication. The

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patient remained in hospitalized for 1 month. The patient was follow up for more than two months. After a month it was seen that he did stricture of the perineoscrotal neo-orificium which was resolved with its enlargement.



**Figure 2:** Enlargement of the narrowing of the perineoscrotal neoorificium



**Figure 3:** Urethral catheterization after enlargement and repaired penis body

### 3. Discussion and Conclusion

Penoscrotal trauma is rare. However significant problems are medical, social and disabling, because testicular trauma is associated with increased rates of salvage ability and preservation of fertility and hormonal function [1]. One of the objectives in management of operative cases of scrotal trauma, is including exploration and repair, is testicular salvage, homeostasis, prevention of infection, and improved recovery time [2]. Important is the laboratory dosing of the male hormone and its balancing with ready-made injections to maintain male sexual activity. Storage of sperm in the bank is necessary to not exclude generation. Restoration of the scrotal and penis preserving the functionality and maintaining a good physician-patient relationship may be a challenge. Careful urological, andrological, psychological follow-up in such cases is of particular importance [5–7].

#### References

- [1] Randhawa H, Blankstein U, Davies T. Scrotal trauma: A case report and review of the literature. Can Urol Assoc J 2019;13:S67–71.
- [2] Wang A, Stormont I, Siddiqui MM. A Review of Imaging Modalities Used in the Diagnosis and

- Management of Scrotal Trauma. Curr Urol Rep 2017;18:98.
- [3] Wang Z, Yang J-R, Huang Y-M, Wang L, Liu L-F, Wei Y-B, et al. Diagnosis and management of testicular rupture after blunt scrotal trauma: a literature review. Int Urol Nephrol 2016;48:1967–76.
- [4] Bhatt S, Dogra VS. Role of US in testicular and scrotal trauma. Radiographics 2008;28:1617–29.
- [5] Addas F, Yan S, Hadjipavlou M, Gonsalves M, Sabbagh S. Testicular Rupture or Testicular Fracture? A Case Report and Literature Review. Case Rep Urol 2018;2018:1323780.
- [6] Buckley JC, McAninch JW. Use of ultrasonography for the diagnosis of testicular injuries in blunt scrotal trauma. J Urol 2006;175:175–8.
- [7] Faveret PLS, Santiago F. Surgical Management of Penile Lesions Secondary to Foreign Body Reaction: A Case Report and Systematic Review. Aesthet Surg J 2018;38:770–80.

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