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A Case Report: A Case of Penile Fracture

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Abstract: ***Penile fracture is a rare condition and surgical emergency [1]. Majority of cases are managed by immediate surgical intervention and better prognosis. However, some cases are misdiagnosed due to improper and uncoupled history given by patient due to social embarrassment and managed conservatively with poor outcomes and complications. We are presenting a case of penile fracture in a 29-year-old patient who presented to surgery department with complaint of penile swelling, pain and difficulty in voiding. A diagnosis of penile fracture was done and surgical repair of defect at tunica albuginea done under spinal anaesthesia and postoperative period was uneventful. Our case report is emphasizing to treat any penile trauma as emergency case early diagnosis early treatment to reduce the chances of post injury complications.***

Keywords: Penile fracture, Tunica albuginea, Blunt penile trauma, corpus cavernosa

1. Introduction

Penile fracture is defined as traumatic rupture of the tunica albugenea of one or both corpora cavernosa of an erect penis [2]. penile fractures are not common in male patients presenting to emergency department. It can be caused by vigorous sexual intercourse masturbation or blunt trauma [3]. In flaccid state injury to the penis is rare because of the thick tunica albuginea, but during erection it becomes as thin as, becoming more susceptible to fracture or tearing. Seeking late medical attention due to social embarrassment and hesitance is common. Early diagnosis and treatment have good outcomes also decreases chances of post - injury complication. Delayed in diagnosis or treatment increases complications such as penile deformity, penile ischema or necrosis also erectile dysfunction. diagnosis is done by proper history and clinical presentation.

We present the case of 29-year-old Male who presented to surgery department with complaint of penile swelling and pain since few hours followed by difficulty in voiding. Patient is diagnosed as case of penile fracture with detailed history taking and clinical presentation also ultrasound was performed to confirm the diagnosis and immediate surgical repair was performed

2. Case Report

A 29-year male was presented to surgery departments with complain of penile swelling and dull aching type of pain. Detailed history revealed that patient had erection while sleeping. patient tried to pressed on to his penis to control erection followed by masturbation patient heard sound of snapping and immense pain. Patient also gave history of difficulty in voiding afterwards.

However, patient has no history of any external bleeding, hematuria, also no history of any sexual intercourse.

Upon arrival patient was vitally stable, conscious and well oriented to time place and person. Local examination was revealed uncircumcised penis with penile swelling, penile deformity and ecchymosis of overlying skin. Penile deviation was noted to right side (see image 1) also there was pain on compression. There was no any urethral discharge, no bleeding from meatus, bilateral testes were palpable, scrotal rugosity was normal and their genital examination was unremarkable based on given history and clinical examination diagnosis of penile fracture was made. an ultrasound was performed to confirm diagnosis which revealed rupture of right corpus cavernous at posterior aspect and heterogenous hypo echoic lesion adjacent to right corpus carvenosum and surrounding hematoma suggesting penile fracture (see image 1).

Image 1: Image showing clinical presentation of penile fracture with penile swelling and ecchymosis

Image 2: Surgical Exploration and identifying the defect and ecchymosis

Surgical penile exploration was performed through a distal circumcising incision, approx. 2 cm size defect was found at posterior aspect of right-side tunica albugenia of corpus caverns near base of penis (see image 2), surrounding hematoma was evacuated, defect of tunica albugenia was repaired by PDS 3.0 in intermittent manner. (See image 3)

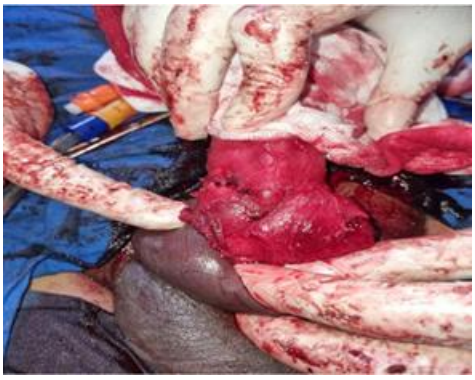

Image 3: Evacuation of hematoma and closure of defect

Image 4: Post operative picture with circumcision

3. Discussion

Penile fracture may present as swollen penis along with ecchymosis or penile deformity. Common age group of between 18 to 66 years [4]. Patients may describe as cracking sound followed by pain and discolouration or swelling of penile shaft. [5]

Penile fracture occurs due to vigorous sexual intercourse female on top, masturbation with or without sex toys, blunt trauma, correction of forceful congenital chordee.

Penile fracture can be diagnosed base on proper history taking and clinical presentation. However, in equivocal cases diagnostic ultrasonography or MRI should be performed to rule out false fracture. Because few cases like rupture of dorsal artery or veins or rupture of suspensory ligament during sexual intercourse or urethral rupture may mimic penile fracture in these cases physical examination may not be adequate for definitive diagnosis

Treatment may be either conservative or surgical intervention. Conservative management includes cold compression, fibrinolytic, splinting, analgesics and anti - inflammatory medications. But long-term outcome of conservative management has poor outcomes and complications such as erectly dysfunction, necrosis, chordee or curved painful erections, arteriovenous malformation, skin necrosis [5]. While surgical management has better outcomes and less complications Penile fractures should be explored and repaired surgically. Immediate surgical repair has faster recovery and decreased morbidity.

Diagnosis and Evaluation

Diagnosis of penile fracture is mostly clinical as history and clinical presentation are highly characteristic [6]. Patient typically presents with cracking sound in errect penis followed by rapid detumescence. Findings includes penile swelling, ecchymosis, penile deviation or deformity as result of hepatoma or oedema and sometimes difficulty in passing urine due to oedema. Careful physical examination diagnostic tools such as cavernography, ultrasonography, or MRI are helpful to rule out penile injury and to determine surgical management [7]. If there is suspicion of urethral injury retrograde urethrogram should be performed before going for surgical intervention. Recent study shows that immediate repair of penile fracture has a low complication rate, shorter hospital stays and better longterm outcome. Early surgical intervention includes evacuation of hematoma, identifying defect and repair, ligation of bleeding vessels and debridement if needed.

Due to personal embarrassment there may be delayed in diagnosis and management which relates to postoperative complications like penile deformity, chordee, necrosis and priapism.

4. Conclusion

A careful history taking and proper clinical examinations are essential for the definitive diagnosis of penile fracture. Patient may present with entirely different complaint and history later reveal the actual complaint and proper history due to social embarrassment. An early diagnosis and immediate surgical intervention prevent complications also increases chances of complete recovery.

Aim of this case presentation is to share our experience on patient education, seeking early medical attention and treat case as emergency, proper history taking, early diagnosis and early surgical intervention, and with better outcome.

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