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Case Report

Surgery Section

Rare Manifestations of Acute Scrotum- A Case Report

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ABSTRACT

Acute scrotum is referred to patients presenting with acute pain or swelling in scrotum or its contents. Clinical evaluation and appropriate radiological investigations helps us to pin point the aetiology of acute scrotum. Male genitourinary cases range from 0.5-2.5% of all emergency cases, although very few cases report the incidence of acute scrotum. Purpose of this case report is to highlight two very rarely reported events presented as scrotal pain and testicular swelling in a 39-year-old male and a 31-year-old-male patient. After radiological examination a diagnosis of acute scrotum was made. Commonly causation is attributed to either acute torsion or acute epididymo-orchitis. Routinely, management of acute scrotum include colour doppler scrotum, based on its findings further treatment is decided either surgical exploration or conservative treatment. Early evaluation and timely management is imperative in preserving the viability of gonads.

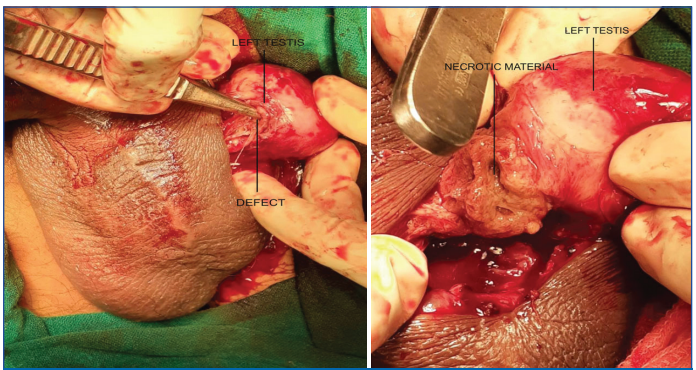
Keywords: Acute torsion, Scrotal pain, Surgical exploration, Testicular swelling

CASE REPORTS

Case-1

A 39-year-old male presented in Surgery Department with left testicular pain and scrotal swelling for two days. Pain was severe, sudden in onset, continuous, non radiating and aggravated by movements. No history of similar complaints in past.

On examination there was diffuse, indurated and tender left scrotal swelling. Ultrasound colour doppler showed rupture of left testis with herniation of non viable testicular tissue through a defect of around 10.9 mm with no parenchymal vascularity. Patient was diagnosed to have testicular rupture. Differential diagnosis includes left testicular torsion or left epididymo-orchitis. On exploration, in tunica albuginea on superomedial aspect of left testis [Table/Fig-1] pus and necrotic material coming out from defect was seen [Table/Fig-2]. Patient was advised for surgical management. Surgical exploration along with left orchidectomy was done. On histopathological examination there was dense infiltration by acute inflammatory cells comprises of neutrophils. There were also seen areas of necrosis and haemorrhage [Table/Fig-3]. Postoperatively there were no complications. There was no left testicular pain and no scrotal swelling on follow-up after one week of discharge.

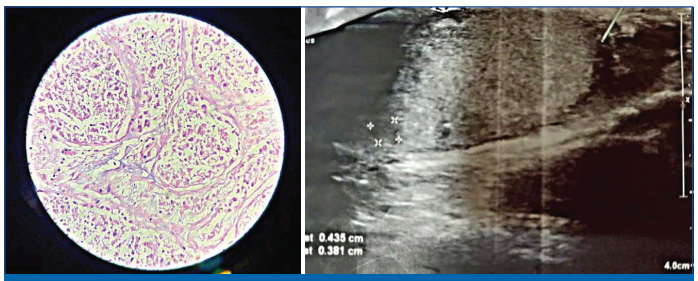


[Table/Fig-1]: Showing tunica albuginea on superomedial aspect of left testis during surgical exploration and orchidectomy of left testis.
[Table/Fig-2]: Pus and necrotic material coming out from defect seen during the surgical exploration. (Images from left to right)

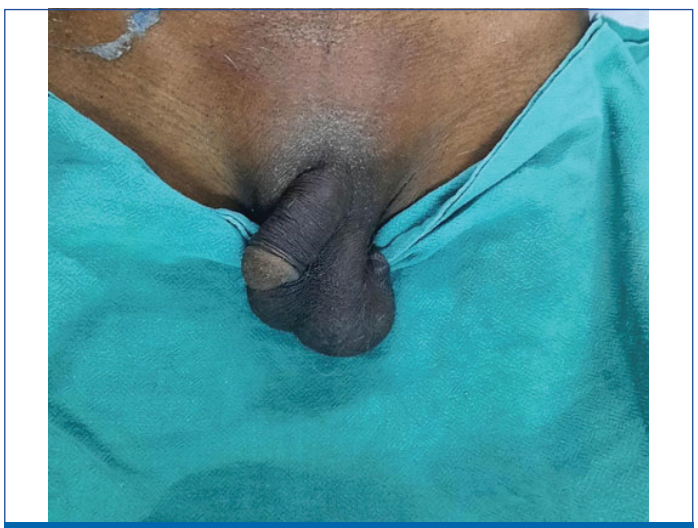
Case 2

A 31-year-old male presented to the Emergency Department with complaint of scrotal pain and lower abdominal pain for one day. There was alleged history of road side accident one day back. Pain was sudden in onset, severe in intensity and continuous.

On examination overlying skin was normal, bilateral testicular tenderness and diffuse scrotal swelling was present. Ultrasound inguinoscrotal region show haematoma in bilateral testes [Table/Fig-4]. Patient was diagnosed to have bilateral intratesticular haematoma. Treatment option was either conservative or surgical management. Patient was managed conservatively with scrotal elevation. Swelling reduced on day 3 and completely resolved on day 4 [Table/Fig-5].



[Table/Fig-3]: Histopathological examination showing dense infiltration by acute inflammatory cells comprised of neutrophils along with the areas of necrosis and haemorrhage. (H&E stain, 40X). **[Table/Fig-4]:** Ultrasound of inguinoscrotal region showing haematoma in bilateral testes. (Images from left to right)



[Table/Fig-5]: Showing swelling completely resolved on day 4.

DISCUSSION

Acute scrotum is defined as acutely painful, swollen scrotum or its contents. Common causes of acute scrotum include testicular torsion, epididymo-orchitis, trauma, hernia [1]. Atraumatic spontaneous testicular rupture is rare occurrence without any previous disease or can follow an episode of epididymo-orchitis' [2]. Male genitourinary cases range from 0.5-2.5% of all emergency cases [3].

Only one case of non traumatic testicular rupture has been published so far. Epididymo-orchitis results in vascular insufficiency due to inflamed structures causing compression of vessels. Also, the toxins released from infectious source and inflammatory cascade result in increased vascular thrombosis lead to testicular infections and ultimately end result of testicular rupture [4]. If vascularity is not compromised, it may help in salvage of the testis. However, if testis is necrotic, orchidectomy is treatment of choice.

Intratesticular haematoma is another rare event and always proceeded by trauma. There is little data that specifically reports the incidence of intratesticular haematomas. If tunica albuginea of the affected testis is not ruptured in the intratesticular haematoma, it appears to involve a compartment syndrome [5]. Small haematomas without any direct or indirect evidence of a testicular rupture are treated conservatively with ice packs, Non steroidal anti-inflammatory drugs and follow-up clinical testing and ultrasound evaluation [6]. However, in large intratesticular haematomas surgical treatment in the form of drainage should be required.

CONCLUSION(S)

Although rare, a prompt recognition of the testicular rupture and intratesticular haematoma are very important. Any delay in recognition of injury may lead to impaired fertility and testicular loss so early recognition avoid need of orchidectomy, as early intervention is pertinent to salvage of gonads.

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