Urology Case Reports 11 (2017) 74–75

Contents lists available at ScienceDirect

Urology Case Reports

journal homepage: www.elsevier.com/locate/eucr

Andrology and Fertility

A 55-Year-Old Man with Right Testicular Pain: Too Old for Torsion?

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ARTICLE INFO

Article history:
Received 25 October 2016
Received in revised form
20 November 2016
Accepted 25 November 2016

Keywords:
Testicular torsion
Testicular pain
Scrotal pain
Adult

ABSTRACT

Testicular torsion is predominantly a disease of adolescence, but age itself should not be an exclusion criterion for the diagnosis. A lack of suspicion for testicular torsion in older patients may result in a missed or delayed diagnosis which jeopardizes the chance of testicular salvage. In this article, we report a case of testicular torsion in a 55-year-old Chinese man.

Introduction

Testicular torsion is primarily an adolescence condition, with over 65% of the incidents happen before 18 years old.[1] However, acute testicular torsion should always be considered as an important differential diagnosis in an older man with unilateral testicular pain. This case report shows that testicular torsion can occur at any age.

Case report

A 55-year-old man presented to the accident and emergency department with a 3-hour history of right testicular pain. The pain was of sudden onset at 2 am, and was associated with mild suprapubic discomfort and dysuria. He had no recent sexual intercourse, no history of trauma, pyrexia or episode of similar attack before. On physical examination, the right hemiscrotum was erythematous. The right testis and epididymis were markedly enlarged and tender while the cord and contralateral side were normal. Urine multistix for leukocytes and nitrate were all negative. In view of clinically suspicious of right testicular torsion, scrotal exploration was offered immediately. However, the patient refused and opted for a Doppler Ultrasound (USG) of the Scrotum. Doppler USG was performed within 1 hour, and it showed an enlarged right testis and epididymis with an absence of color doppler flow. Surgical exploration was arranged immediately, and intra-operatively, a 540-degree closed-book testicular torsion was found. The testis was untwisted and packed with warm gauze for 30 minutes, however, the testis was deemed non-viable despite these maneuvers. There was a bell clapper deformity of the left testis and 3-point fixation was performed. The diagnosis of testicular infarction was confirmed histologically (Figs. 1–3).

Discussion

Testicular torsion is defined as twisting of the spermatic cord within the tunica vaginalis. The predisposing factors included anatomical abnormalities, injury, exercise and cold weather.[2] Bell clapper deformity is the most common anatomical abnormality which there is an abnormally high attachment of the tunica vaginalis and result in a transversely oriented testis instead of a cephalocaudal one, while other less common abnormality included long mesorchium and undescended testis.

A 25-year review[2] showed that 6% of testicular torsion occurred at age 31 or more. There are case reports showing that testicular torsion could happen at age beyond 60.[3] Although more than 88.5% of testicular torsion happen before age of 25,[2] testicular torsion should not be only ruled out by age. There were some differences in testicular torsion between adult and adolescent. Cumming et al[4] revealed that there were significantly lower salvage rate and higher degree of testicular twisting in the older presentation of testicular torsion than the younger group. In younger group (age

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http://dx.doi.org/10.1016/j.eucr.2016.11.023

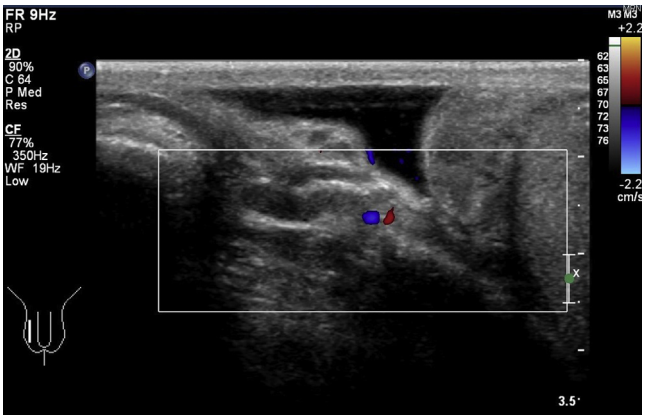

Figure 1. The USG image of our patient demonstrated a twisted cord, reduced echogenicity of right testis and diffusely enlarged epididymis with near absent color doppler flow.

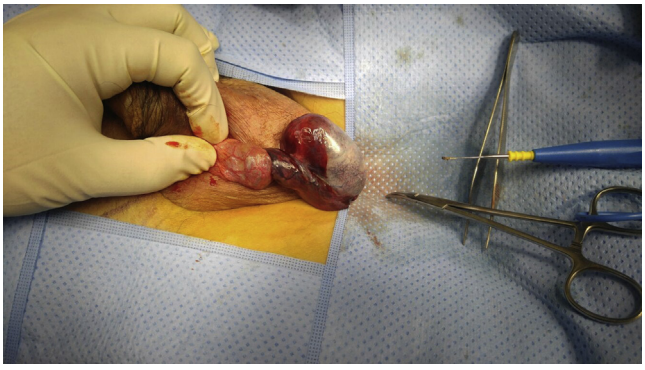

Figure 2. Intraoperative finding: dusty looking and congested right testis.

8–20), there was 70.3% salvage rate with mean degree of torsion of 431. While in older group (age 21–34), there was only 41% salvage rate with mean degree of torsion of 585.

Doppler ultrasound could offer up to 97% accuracy in diagnosing testicular torsion[5] but might delay scrotal exploration, jeopardizing the chance of salvage. In testicular torsion, there would be increased volume of epididymis volume, reduction in parenchyma echo and reduction in color doppler flow. If scrotal exploration could be done within 6 hours, only 4% of affected testes were non-viable.[2]

Infection and testicular torsion are the key differential diagnoses of acute unilateral testicular pain. Vomiting, scrotal pain accompanied by abdominal pain and history of past attack of unilateral or bilateral testicular pain and an abnormal lie of contralateral testis are commonly presented in testicular torsion.[2] Sign of pyrexia, positive urine multistix in leukocyte or nitrate, elevated white cell

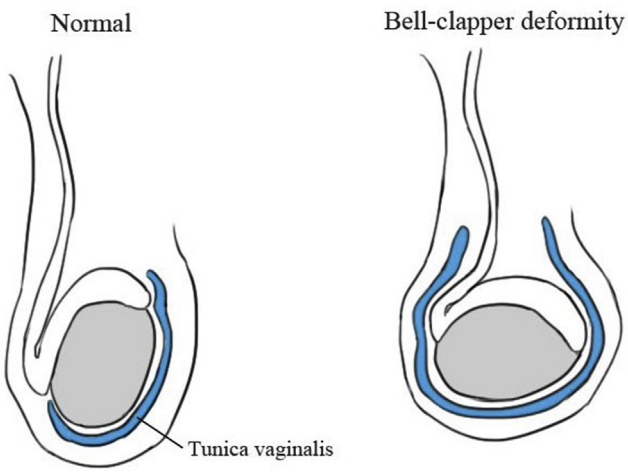

Figure 3. Computer drawing illustrating high attachment of tunica vaginalis.

count in blood are more suggestive of epididymo-orchitis/orchitis. Study[4] had showed that testicular torsion in older age group was related to higher degree of torsion and lower salvage rate. Therefore, we should consider offering early surgical exploration if the diagnosis is in doubt.

Conclusion

Testicular torsion is not exclusively an adolescent disease. Moreover, adult cases are associated with higher degree of torsion and lower salvage rate. Thus irrespective of patient's age, attending urologist should have high index of suspicion for testicular torsion in patient presenting with unilateral testicular pain without sign of urinary tract infection. In case of doubt, urgent scrotal exploration should be offered, whereas doppler USG can also be done if readily available.

Conflict of interest

There is none conflict of interest.

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