Inflammation and infection

**Testicular torsion in older men: It must always be considered**

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**Introduction**

Scrotal pain is a common presenting symptom among patients referred to emergency room. True urological emergency, such as testicular torsion, must be considered.

Testicular torsion is exceedingly rare in the geriatric population, in whom infectious or even malignant etiologies are more common. There are reports of men in the sixth and seventh decades of life with torsion. The testicular salvage rate in adults with torsion is poor, because of the lack of recognition of this entity by physicians.

We present the case of a 66-year-old man who presented to the emergency department with scrotal pain and was eventually found to have testicular torsion after scrotal imaging and surgical exploration.

This case highlights the need to consider torsion in the differential diagnosis of any man presenting with scrotal pain, regardless of his age.

**Case report**

A 66-year-old man presented to the emergency department with a 6-h history of right-sided scrotal pain and swelling. The pain had begun abruptly while doing cycling and was constant and severe. It was not associated with trauma, fever, or irritative voiding symptoms. He was given a diagnosis of epididymo-orchitis by the emergency department staff and discharged home with a course of ofloxacin.

The patient was referred to urology department. He was seen for follow-up one week later, he had had only moderate improvement of his pain and no improvement of the scrotal swelling.

Examination revealed enlarged, erythematous right hemiscrotum with induration extending to the external inguinal ring. The left scrotum and testicle were normal on examination.

He described a history of intermittent scrotal pain spontaneously resolving of the right testis.

Because of the lack of improvement, a scrotal ultrasound was ordered. The ultrasound showed an absence of blood flow to the right testicle with normal flow on the left side (Fig. 1).

Scrotal exploration revealed 720-degree intravaginal torsion of the right spermatic cord and a firm testis. Right orchiectomy and left orchiopexy were performed (Fig. 2).

The final pathological examination revealed findings consistent with testicular infarction and no evidence of malignancy.

**Discussion**

Testicular torsion is a surgical emergency, requiring intervention within a matter of hours. Usually presenting in children and adolescents, it is a rare cause of scrotal pain in the adulthood. However, anecdotal reports of adult men with torsion add credence to the need for considering that diagnosis in males of any age with acute scrotal findings.

Because of the rarity of this entity in older men and the relative prevalence of epididymitis as a cause of scrotal pain, most cases are misdiagnosed and ultimately result in orchidectomy or testicular atrophy.

In addition, Cummings et al. shows that adults had more severe cord twisting, which may explain the increased likelihood of testicular loss. He postulates that the severity of spermatic cord twisting may in fact be worse in adults with torsion, leading to a lower testicular salvage rate than in children or adolescents with the same condition.

Doppler ultrasound, shown to have 100% sensitivity and 100% negative predictive value for torsion, is becoming an increasingly accepted first-line investigation for scrotal pain, particularly in the elderly male where the diagnosis of epididymo-orchitis is more common.

**Conclusion**

Our case demonstrates that testicular torsion can occur in an older man. It must be included in the differential diagnosis of acute scrotum at any age.

History and physical examination remains the key leading to the diagnosis. Color Doppler ultrasound can be helpful to verify the absence of blood flow on the affected side but it should not delay surgical exploration.
1. Witherington R, Jarrell TS. Torsion of the spermatic cord in adults. *J Urol.* 1990;143:62-66. https://doi.org/10.1016/S0022-5347(17)39866-X.

2. Potent K, Thyer I. Testicular torsion in a 65-year-old male identified using Doppler ultrasound. *ANZ J Surg.* 2014 May;84(5):395-9. https://doi.org/10.1111/ans.12565.

3. Davol P, Simmons J. Testicular torsion in a 68-year-old man. *Urology.* 2005;66:195-7. https://doi.org/10.1016/j.urology.2005.02.001.

4. Cummings JM, Boulter JA, Sekhon D, et al. Adult testicular torsion. *J Urol.* 2002;167:2109-12. https://doi.org/10.1016/S0022-5347(05)65096-3.

5. Altinkilic B, Pilatz A, Weidner W. Detection of normal intratesticular perfusion using color coded duplex sonography obviates need for scrotal exploration in patients with suspected testicular torsion. *J Urol.* 2013;189:1853-5. https://doi.org/10.1016/j.juro.2012.11.166.

Fig. 1. Doppler ultrasound demonstrating absent vascular flow in the right testis.

Fig. 2. 720-degree intravaginal torsion of the right spermatic cord and a firm mottled testis.

References section

1. Witherington R, Jarrell TS. Torsion of the spermatic cord in adults. *J Urol.*