

CASE REPORT

A 40-year-old man with testicular torsion and large bilateral spermatoceles

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ABSTRACT

Testicular torsion is a rare disease that mostly involves children. Peak incidence is in infancy and in adolescence. Testicular torsion is rarely seen in men over 40 years of age and has only once been accompanied with spermatocele. We report the case of a 40-year-old man with testicular pain one day prior to visiting our clinic. The patient's visit to the clinic was delayed due to history of occasional testicular pain related to his bilateral spermatoceles. On arrival, a color Doppler ultrasound test was performed, which revealed heterogeneous echo in the right testis with no vascular flow, suggestive of torsion, as well as two cystic lesions in the right and left scrotums indicating spermatoceles. The patient was immediately transferred to the operating room where the bilateral spermatoceles were resected and after detorting, the right testis was saved. After four months, a normal left testis along with partial right testicular atrophy was observed. It is highly recommended to educate patients with spermatocele who have no indication for surgical treatment to visit their physician in case any new testicular pain is experienced. Furthermore, testicular pain regardless of the co-existing pathology may always be treated as an indicator of suspected torsion.

Keywords: torsion, testis, spermatocele

INTRODUCTION

Scrotal pain is a common complaint among patients who are referred to urologists. Not only benign etiologies but also urologic emergencies such as testicular torsion should be considered in the differential diagnosis. Spermatic cord torsion is one of the urologic emergencies which mostly develops during puberty. Its annual incidence is 1 in 4000 among individuals¹ under 25 years of age.¹

The survival rate of the involved testis is associated with the duration and grade of torsion.^{2,3} Although spermatic cord torsion can occur at any age, there are few reports of testicular torsion in older individuals.^{4,5} Moreover, because of the rare incidence of torsion among the elderly, lack of clinical suspicion may lead to delayed or missed diagnosis.⁶ Herein, we present the case of a 40-year-old man with testicular torsion accompanied by spermatocele (epididymal cyst). According to the available literature, this is the second reported case of torsion that is accompanied by spermatocele. As the patient was previously diagnosed with spermatocele and had occasional testicular pain as well as bilateral testicular masses for a long time, he had a late visit to his doctor leading to the delayed diagnosis of testicular torsion.

CASE REPORT

A 40-year-old man visited the emergency department complaining of progressive right testicular pain and edema for a day prior to his visit. He had no complaints of fever, chills or any history of trauma. However, he mentioned a previous history of occasional testicular pain and edema. Due to being previously diagnosed disease with spermatocele, he had been relating the new symptoms to this same disease. Physical examination revealed the presence of edema and severe tenderness of the right scrotum.

The pain did not relieve with scrotal elevation and the right testicle and epididymis were not separately palpable. Although the left testis was large, it was non-tender. Urine analysis was normal. In addition, biochemical laboratory data and CBC levels were almost normal. Accordingly, a color Doppler ultrasound was performed and the report was as follows:

"The right testis is seen with heterogeneous echo without vascular flow suggestive of torsion.

A cystic lesion, 103*49 mm in diameter, is seen posteroinferior to the left testis while another cystic lesion is seen, 59 mm in diameter, inferior to the right testis suggestive of spermatocele."

The patient was immediately transferred to the operating room and surgical exploration of the scrotum was performed. The right testis had rotated 540 degrees around the spermatic cord revealing a large spermatocele connected to the epididymis (Figure 1). The testis was cyanotic but its blood supply improved after a few minutes. The decision was made to save the testis therefore the spermatocele was resected and the testis was fixed to the scrotum by a non-absorbable suture. The left hemiscrotum was then explored and the very large spermatocele was resected while the left testis was also fixed to the scrotum by non-absorbable sutures (Figure 2).

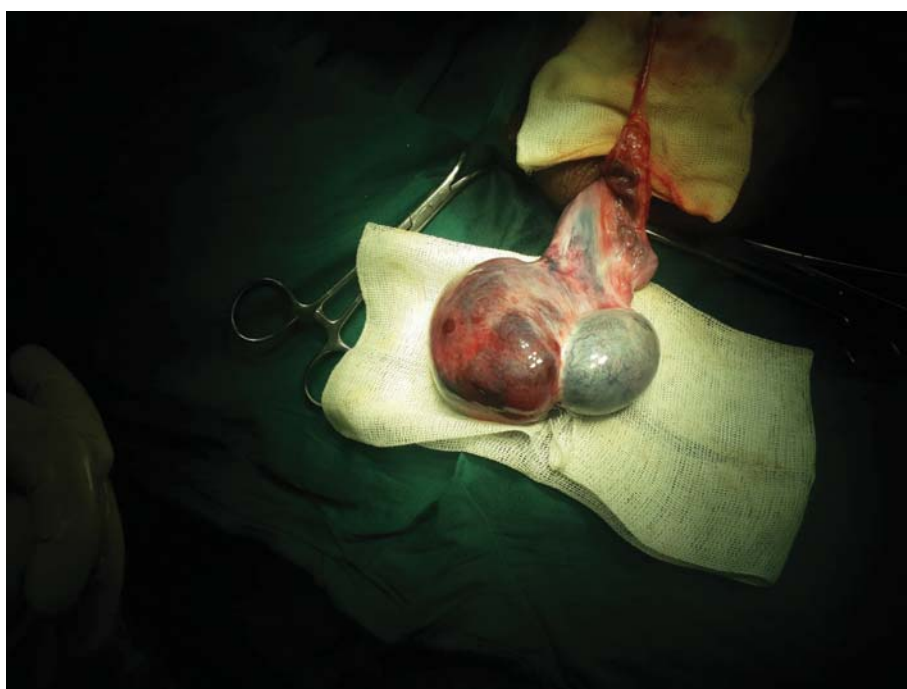


Figure 1. The patient's right testis with torsion.

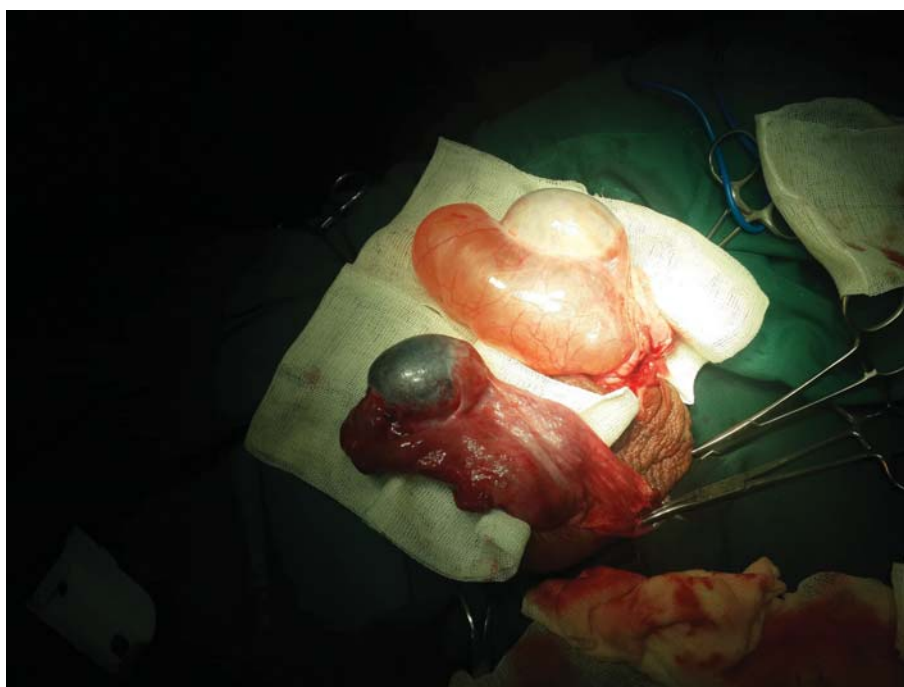


Figure 2. The left testis and the spermatocele attached to the right testis after spermatocele resection.

DISCUSSION

Testicular torsion is considered a surgical emergency because of two reasons; firstly, it is accompanied with severe pain and secondly, any delay in surgical treatment may lead to reduced or lack of fertility as a result of testicular infarction. Nevertheless, delayed diagnosis is equal to loss of the involved testis. Fortunately, torsion is uncommon in adulthood however, Cummings et al.,⁷ have rejected this hypothesis in their study and state that torsion is more common than what is reported in adulthood. Therefore, it seems that although testicular torsion is limited to children and adolescents, it can occur in any age group; taken together, around 39% of torsion cases are developed in adulthood.⁸

Several researchers have explained that there is a golden time period of 4 – 8 hours from the initiation of torsion's symptoms till surgical intervention for saving the testis.⁹ To the best of our knowledge, only one similar case has been reported to date.¹⁰ The first case reported was for a 57-year-old man with a six month history of spermatocele diagnosis. The patient presented to the emergency department with the complaint of progressive and painful swelling in the right scrotum for eight hours. In surgical exploration, testicular torsion of 720 degrees was diagnosed; he underwent orchiectomy due to testicular damage.

Unlike the latter case, our patient had a unique feature; he had very large and bilateral spermatoceles and did not undergo orchiectomy.

In 2008, Ilbey et al., reported the case of a patient with delayed visit to the physician leading to darkening of his right testis during surgery. Although his testis was saved, mild atrophy occurred after a few months; this has been discussed in previous studies. Nevertheless, another diagnosis that should be considered in such patients is torsion of the spermatocele; although very rare, few cases have been reported in the literature.^{11,12}

In children and adolescents, the cause of torsion is a congenital defect known as the "bell-clapper deformity", and yet the cause of torsion in adulthood is unclear; disruption of the spermatic cord axis by spermatocele may lead to an increased risk of torsion.¹⁰ Among these predisposing factors, the presence of a large spermatocele can also be mentioned, which may lead to torsion by inserting a certain force on the spermatic cord. As patients with spermatoceles, which are superimposed by torsion, may have a delayed visit to the doctor due to similar long-term occasional symptoms, they need to be educated to be aware of the onset of any new pain and edema in their testicles and to visit their doctors early on in order to prevent a missed diagnosis of testicular torsion.

CONCLUSION

This case report highlights that there may be an association between spermatoceles and torsion of the testis and that this hypothesis relies on the concept

that the cord axis is disrupted by a spermatocele. It can be concluded that acute scrotal pain must be treated as a possible indicator of torsion regardless of co-existing pathology.

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