Torsion of the testis after hydrocelectomy: an unexpected complication.

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Abstract

Introduction
Hydrocele is one of the common causes of scrotal swelling in the adult and hydrocelectomy is the surgical treatment. The common complications following this surgery include infection and haemorrhage. We report a very rare case of torsion of testis after hydrocelectomy and to best of our knowledge this has never been reported in literature.

Case report
A 44 year old male patient underwent routine surgery for bilateral hydrocele. He presented to us 3 days later with history of acute pain on the right side of the scrotum. An emergency ultrasound of the scrotum was done which showed an avarascular right testis. On exploration, it was found that the right testis had undergone torsion and was gangrenous. Patient underwent orchidectomy.

Conclusion
Torsion of the testis is an acute surgical emergency seen in children and adolescent. Torsion of the testis after a routine hydrocele surgery is extremely rare and is not been reported to best of our knowledge.

Introduction
Testicular torsion is an abnormal twisting or rotation of the testis and spermatic cord resulting in an acute severe scrotal pain. Testicular torsion was first described in 1840 by Delasaiuje²,³ and was first reported in a newborn by Taylor in 1897. Hydrocele is an abnormal collection of serous fluid between the layers of tunica vaginalis.⁴,⁵

It is the most common cause of painless scrotal swelling in children.⁵ There have been rare case reports of testicular torsion occurring in congenital hydrocele.⁶ However, testicular torsion after hydrocelectomy in an adult has never been reported in literature. This paper reports an unexpected complication of torsion of the testis after hydrocelectomy.

Case report
A 44 year old male patient underwent excision and eversion of the primary vaginal hydrocele for which he underwent excision and eversion of the sac. The patient was comfortable on postoperative day 1. His drain was removed and he was discharged. Three days after surgery, he developed acute pain and swelling in the right scrotum. The patient was taking self medication and presented to us on the 5th day with a history of severe scrotal pain, swelling and fever. On examination, the right side of the scrotum was swollen and red. There was a local rise of temperature and tenderness. His testis could not be felt. The suture lines were healthy. An urgent scrotal ultrasound was done which showed that avarascular right testis with diffuse scrotal was oedema and enlarged testis. The left testis was normal. The patient underwent emergency scrotal exploration under anaesthesia. The testis that had undergone torsion was avarascular and gangrenous [Figure 1]. He underwent right orchidectomy. The patient did not give consent for left orchidopexy.

Discussion
Torsion of the testis is one of the acute surgical emergencies occurring in children. The peak incidence of torsion of the testis is between 12-18 years.¹ In fact, patients aged between 12 to 18 years comprises of 625 cases whereas 20% of the cases occurred in 7. Torsion of the testicle is a relatively rare condition occurring with an annual incidence of 4.5 in 1,00,000 in males between 1 to 25 years.⁷ The risk of bilateral synchronous or metachronous testicular torsion is 2%.¹ The torsion can be intravaginal torsion or extravaginal torsion.¹ In contrast, hydrocele can be congenital or acquired. Acquired hydrocele occurs in 1% of adults, is more commonly idiopathic and is bilateral in 7-10% of the cases.¹ The other causes of hydrocele are infection, tumours, filariasis, tuberculosis or torsion.¹ Torsion of the testis after surgery for hydrocele is not a known complication. It has not been reported in literature yet. The reason could be that either it has never occurred till date or it is not reported due to the fact that it is a negative outcome. We are not clear as to what is the reason of occurrence of this torsion after hydrocelectomy. The surgery for hydrocele is a regular surgery and is generally considered safe even in the hands of the less experienced.

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Figure 1: Torsion of the testis.

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We even considered the fact that removal of the romovac drain might have triggered the rotation of the testis. The irreversible ischemia starts within 6 hours of the torsion. This patient presented to us almost 48 hours after the acute onset of the scrotal pain by which time the testis had already undergone infarction resulting in orchidectomy. This case is reported by us to share our unexpected complication that has occurred after this simple regular procedure and one should be vigilant and thoughtful about occurrence of such an event after the hydrocelectomy.

**Conclusion**

Torsion of the testis after hydrocelectomy is an extremely rare complication and has not been reported. One should suspect this rare presentation when the patient develops acute pain after hydrocelectomy. Delayed presentation results in orchidectomy as the testis undergoes complete gangrenous changes.

**Consent**

Written informed consent was obtained from the patient for publication of this case report and accompanying images. A copy of the written consent is available for review by the Editor-in-Chief of this journal.

**References**