



Traumatic Testicular Dislocation with Torsion: A Case of ‘Dual Trouble Testis’

Authors

Renjini S¹, Mohanan K², Suny T³, Nikhil KP⁴

¹Junior Resident, ²Professor, ³Additional Professor, ⁴Junior Resident

Department of Radiodiagnosis, Govt. Medical College, Thrissur, Kerala, India

*Correspondence Author

Renjini S

Sreeragam, Puthiyakavu, Mavelikkara (PO), Alappuzha,
Kerala, PIN-690101, INDIA

ABSTRACT

Traumatic testicular dislocation is a rare complication of blunt abdominal injury. Initial imaging studies done routinely in cases of blunt abdominal injury usually miss the diagnosis. Open surgical techniques are often necessary to reposition the testes. We report a case of dual trouble in testes in the form of traumatic testicular dislocation with torsion, an unreported entity, diagnosed during ultrasound imaging. Radiologists should look for the location and echogenicity of both the testes routinely in cases of trauma.

Keywords- testicular torsion, testicular dislocation, dual trouble testis

INTRODUCTION

Traumatic testicular dislocation is a rare complication of blunt abdominal injury ^[1,2,3]. The diagnosis is usually not immediate, and open surgical techniques are often necessary to reposition the testes. The dislocated testis is usually functional except in cases of late presentation ^[4]. We report a case of traumatic testicular dislocation in which the Doppler studies showed an avascular testis with torsion. This is the first case report of its kind with a dual pathology in the testis..

CASE REPORT

A 37 -year-old male motorcyclist presented to the emergency department with a history of road

traffic accident, six hours prior to presentation. He was riding a motorcycle on the same day and had a collision with an auto rickshaw, following which he had swelling and pain over the left inguinal region. On examination he had a GCS (Glasgow Coma Scale) of 15/15. His vitals were stable. He had multiple bruises and abrasions over the right inguinal region and over the right thigh. His left scrotal sac was empty and he had a swelling over the left superficial inguinal area [Figure 1]. His abdomen was soft on examination with no guarding or rigidity. He had no history of inguinal swellings, undescended or retractile testis. He did not have any history of inguinal hernia, and corroborated to having both the testis in their normal position prior to the episode.

An ultrasound examination of the scrotum revealed absent testis in the left hemiscrotum. Left testis was noted in the left inguinal region which appeared hypoechoic and showed absent colour flow on Doppler imaging [Figure 2, 3]. Small amount of fluid with echoes was also noted in left TV sac. The right testis was normal in location, vascularity and echogenicity.

Patient underwent an emergency left inguinal region exploration. Intraoperative findings included a gangrenous testis in the superficial ring with a torsion of 1 ½ turns. A left-sided orchidectomy was performed [Figure 4].

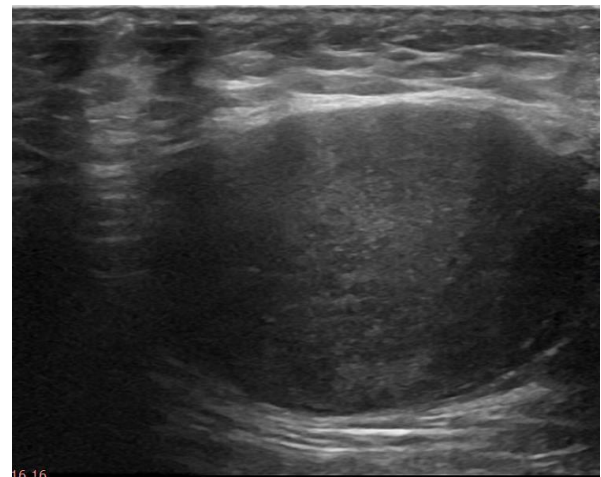


Fig. 2 Gray scale imaging showing left testis in inguinal region. Testis appeared hypoechoic with normal size



Fig.1 Physical examination revealed an empty left hemiscrotum with swelling in left inguinal region (arrow)



Fig. 4 Intraoperative gangrenous left testis

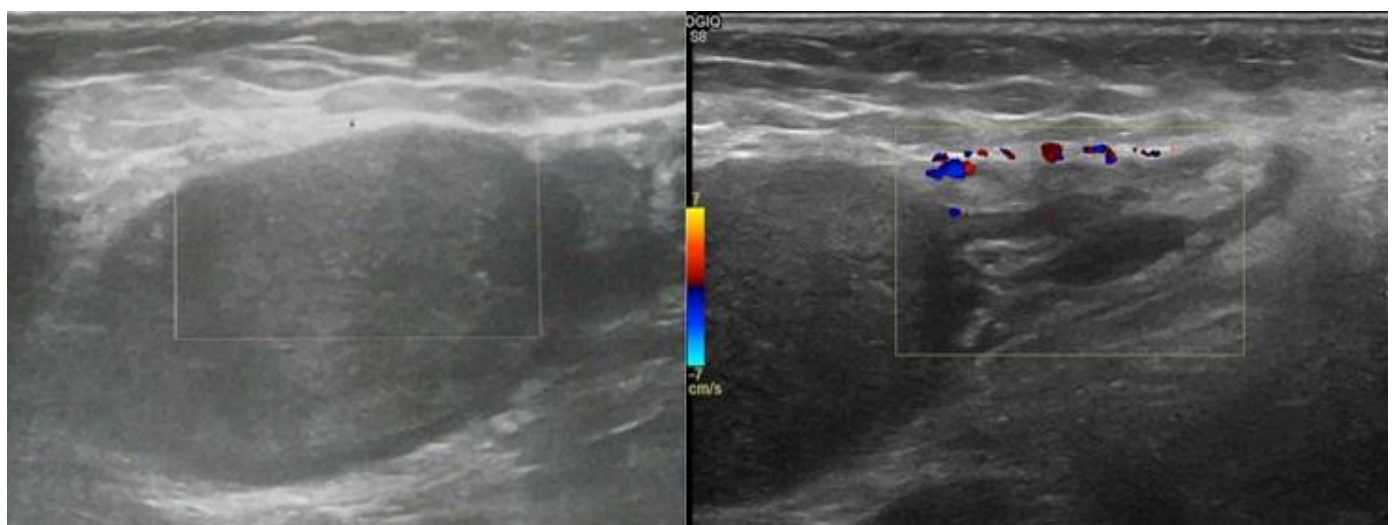


Fig. 3 Colour Doppler showing absent flow signals in testis and its vascular pedicle

DISCUSSION

Traumatic testicular dislocation (TTD), a rare complication of blunt abdominal injury is usually missed during the initial examination. It was initially described by Claurby in 1818, in a soldier who was run over by a wagon. Unilateral and bilateral cases have been described previously. It is more common in motorcycle injuries in which the rider has his scrotum at risk due to the fuel tank which is placed anterior to the scrotal sac while riding^[5,6].

According to Alyea (1929), the common sites to which the testis is dislocated include superficial inguinal, pubic, canalicular, penile, abdominal, perineal and acetabular^[7]. Goulding classified testicular dislocations into two groups: internal and superficial, depending on whether the testis ascends through the external ring or not^[2, 8].

The presentation of testicular dislocation may be either immediate or may be delayed up to months. The dislocated testis is usually viable even in delayed presentations, although impaired spermatogenesis has been reported^[4].

Retrospective studies show that initial imaging done routinely in cases of blunt abdominal injury usually miss the diagnosis of a TTD^[1].

Reports of a dislocated testis undergoing torsion have not been described in the literature till date. Also notable is the fact that the testis did not have any predisposing lesion for torsion in our case.

Retrospective studies show that initial imaging done routinely in cases of blunt abdominal injury usually miss the diagnosis of a TTD^[1].

CONCLUSION

With the rising usage of motorcycles in this part of the country, TTD merits a consideration in all cases of blunt injury abdomen. Radiologists should be particularly suspicious in such cases and should look for the location and echogenicity of both the testes routinely. The co-occurrence of dual trouble in the form of TTD with torsion is being reported as a new entity.

ACKNOWLEDGEMENT

The authors thank the residents of Department of Radiodiagnosis, Govt. Medical College, Thrissur for the support extended in preparation of manuscript.

REFERENCES

1. Ko SF, Ng SH, Wan YL, Huang CC, Lee TY, Kung CT, et al. Testicular dislocation: an uncommon and easily overlooked complication of blunt abdominal trauma. *Ann Emerg Med.* 2004;43:371–5.
2. Goulding FJ. Traumatic dislocation of testis: addition of two cases with a changing etiology. *J Trauma.* 1976;16:1000–2.
3. Bromberg W, Wong C, Kurek S, et al. Traumatic bilateral testicular dislocation. *J Trauma.* 2003;54:1009–11
4. Pathological changes of traumatic dislocated testis. Hayami S, et al. *Urol Int.* 1996
5. Ihama Y, Fuke C, Miyazaki T. A two-rider motorcycle accident involving injuries around groin area in both the driver and the passenger. *Leg Med (Tokyo)* 2007; 9: 274– 277.
6. Lujan Marco S, Budia Alba A, Bango Garcia V, Ramirez Backhaus M, Delgado Oliva FJ, Jimenez Cruz JF. Traumatic testicular dislocation [in Spanish]. *Actas Urol Esp* 2006; 30: 409–411.
7. Schwartz SL, Faerber GJ. Dislocation of the testis as a delayed presentation of scrotal trauma. *Urology* 1994; 43: 743–745.
8. Pollen JJ, Funckes C. Traumatic dislocation of the testis. *J Trauma* 1982;22:247-9.