International Surgery Journal
Saeed Z et al. Int Surg J. 2025 Dec;12(12):2242-2244
http://www.ijsurgery.com
pISSN 2349-3305 | eISSN 2349-2902

DOI: https://dx.doi.org/10.18203/2349-2902.isj20253867

Case Report

Testis on the move: a rare and elusive case of traumatic testicular displacement to groin

Zabeena Saeed[1]*, Prajna P. Y.[1], J. P. Morang[2]

[1]Department of General Surgery, NEMCARE Multispeciality Hospital, Guwahati, Assam, India
[2]Department of Urology, NEMCARE Multispeciality Hospital, Guwahati, Assam, India

Received: 20 October 2025
Accepted: 14 November 2025

***Correspondence:**
Dr. Zabeena Saeed,
E-mail: drzabeenasaeed@gmail.com

ABSTRACT

Testicular dislocation after blunt trauma to scrotum or to the abdomino-pelvic region is a rare entity, which happens due to spasm of cremasteric muscles. It can be unilateral or bilateral. It can go unnoticed on the first clinical examination at presentation because of associated injuries to other major organs. In this case report, we present the case of an adult male who presented with road traffic accident injury to the faciomaxillary region at some health institute but was later diagnosed with traumatic dislocation of right testis to groin. Later, he presented in our health facility where he was evaluated and diagnosed with traumatic dislocation of the testis of the right side. After confirming the clinical diagnosis of traumatic testicular dislocation with radiological examination, he underwent emergency surgical exploration of right testis and proceeded to orchiopexy. His post op period was uneventful and he was discharged on post op day second. On follow up, the patient did not have any urologic or sexual dysfunction on clinical examination and follow up radiological examination was also normal. Scrotal examination should be thoroughly done to avoid the delay in making the diagnosis of traumatic testicular dislocation. Although few cases can be managed conservatively with manual reduction, surgical exploration remains the mainstay so as to avoid the further complications later in life.

Keywords: Traumatic testicular dislocation, Trauma, Motor vehicle collision, Orchiopexy, Testis on the move

INTRODUCTION

Testicular dislocation is defined as the displacement of normally located testis to some other location other than scrotum, and was first reported by Claubry in 1818.[1] Dislocation of the testis from scrotum to groin is a rare complication seen in blunt trauma abdomen.[2] It might go unnoticed at first glance, due to other injuries and is discovered after thorough general physical examination later. The most common cause for this traumatic dislocation is thought to be spasm of cremasteric muscle. Delayed diagnosis of dislocation of testis will lead to its delayed correction and hence might lead to infertility as a complication due to elevated temperature leading to decreased spermatids, spermatogonia and relatively increased sertoli cells.[3] Manual reduction is of not much success, and early exploration and correction is required.

CASE REPORT

A 24-year-old male, working as a journalist, met with a road traffic accident while returning home from his office in a two wheeler. There was no history of vomiting, ENT bleed, seizure and loss of consciousness. He had no history of any comorbidities, genitourinary problems, surgery in the past. He was taken to the emergency department of the nearby hospital for first aid. He suffered with fractured left zygomaticomaxillary complex (undisplaced), two broken teeth, injury over the nose, decreased vision with multiple bruises on body. He was managed in an ICU setting. On the second day of hospital stay he complained of right groin swelling. Bladder and bowel movement was normal.

After that he presented our healthcare in a fully conscious, oriented in time, place and person and in hemodynamically stable condition.

On examination he had an empty right hemiscrotum with ovoid swelling in right groin area which was mildly tender. The overlying skin of scrotum and groin looked normal. Contralateral scrotum and groin was normal, and he reported the previous scrotal position of both the testis. On further evaluation, the ultrasonography (USG) whole abdomen and scrotum showed empty right hemiscrotum. The right testis was normal in size and echotexture and was located in the right inguinal region. Doppler study showed the adequate blood supply to the displaced testis. The left testis was intrascrotal in position with no abnormality and adequate blood supply. He was planned for emergency scrotal exploration and proceeded to right orchiopexy. In the OT, under general anaesthesia (GA), manual reduction was tried but it failed and hence right scrotal exploration with orchiopexy was performed successfully. He was discharged two days after surgery in a hemodynamically stable condition with an uneventful post-op period of hospital stay. He was followed up on OPD basis. At 6 month follow up, there was no genitourinary complication and both the testis were found to be of equal size and in normal intrascrotal position.

Figure 1: On examination, bulge seen in right groin.

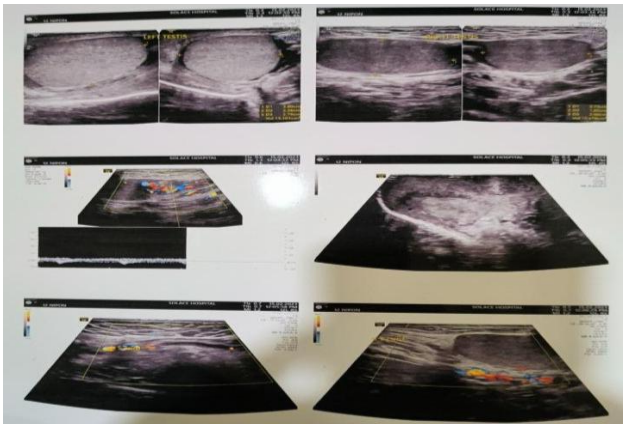

Figure 2: High resolution USG with Doppler of bilateral scrotum, showing hypovascularity in right testis.

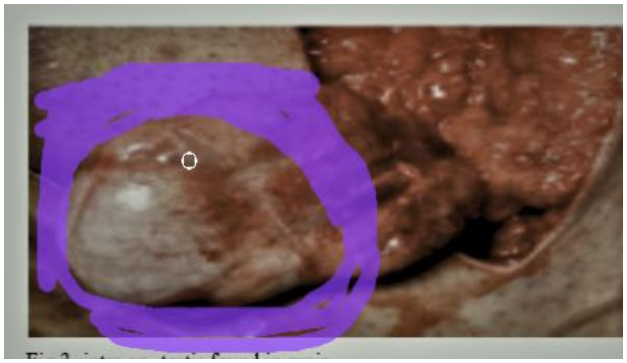

Figure 3: Intra op-testis found in groin.

The post op period was uneventful and he was discharged on post op day second. On follow up, the patient did not have any urologic or sexual dysfunction on clinical examination. Both the testis was of normal size at follow up. Follow up radiological examination was also normal with adequate vascularity in bilateral testes.

DISCUSSION

TTD is usually related to straddle injuries from motorcycle accidents where the rider is propelled forward, with the scrotum and perineum striking the fuel tank. The shape of the fuel tank is such that it drives a smooth wedge into the groin area, forcibly displacing each testis in supero-lateral direction.[4] The main mechanism is the forcible push to testis out of scrotum due to rupture of the fascia of spermatic cord. Predisposing factors include a cremasteric muscle reflex, a widely open superficial inguinal ring, and the presence of indirect inguinal hernia and an atrophic testis.[8] Dislocation of the testis is commonly unilateral. However, it is bilateral in approximately 30% of patients. It usually presents soon after the injury, but has been reported to occur 4 days after a scrotal trauma. The most common site of dislocation is the superficial inguinal region, which accounts for 50% of cases. Other possible sites reported in previous studies are the pubic, penile, canalicular, truly abdominal, perineal, acetabular, and crural regions.[5]

Some studies reported nine groin trauma patients where the testicular dislocation diagnosis was initially missed, but the delayed diagnosis was made within an average of 19 days.[2] The key to early diagnosis of TTD is thorough general physical examination of the patient and being aware that though uncommon but testicular dislocation can take place after blunt trauma of abdomen, especially after motorbike injuries. Differential diagnosis will include retractile testis, cryptorchidism, ectopic testis or traumatic torsion. Doppler ultrasound scan should be performed to confirm intact viable testis and to exclude coexisting problems, i.e. testicular rupture, torsion or hematoma.[6] Closed reduction may be attempted as the initial treatment; however, associated testicular torsion or rupture is a contraindication for closed reduction and these should be ruled out by imaging before attempting closed reduction.[7]

Multiplanar reformatted images of CT scans are helpful in diagnosing testicular dislocation and are better in demonstrating the relationship of testis, scrotum, and inguinal region.[8] Open reduction is indicated for the delayed case, or if there are difficulty in determining the integrity of dislocated testis, possibility of torsion, failure of close reduction, the minimal morbidity of an inguinal exploration.[9]

Early diagnosis and treatment are recommended to preserve testicular function and to avoid the risk of malignant transformation.[10]

CONCLUSION

Testicular displacement after trauma, though rare but can lead to future complications, in case of missed diagnosis. Hence, scrotal examination should be thoroughly done to avoid the delay in making the diagnosis of traumatic testicular dislocation. Although few cases can be managed conservatively with manual reduction, in the case of concomitant testicular rupture or torsion, closed reduction must be avoided and surgical exploration remains the mainstay so as to avoid the further complications later in life.

ACKNOWLEDGEMENTS

Authors would like to thank the Department of Urology and General Surgery of Nemcare Multispeciality Hospital.

Funding: No funding sources
Conflict of interest: None declared
Ethical approval: Not required

REFERENCES

1. Claubry E. Observation sur une retrocession subite des deux testicules dans l'abdomen, a suite d'une violente compression de la partie inferieure de la paroi abdominale par une roue de charette. J Gen Med Chir Pharm. 1818;64:325.
2. 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.
3. Hayami S, Ishigooka M, Suzuki Y, Sasagawa I, Nakada T, Mitote K. Pathological changes of traumatic, dislocated testis. Urol Int. 1996;56:129-32.
4. Pollen JJ, Funckes C. Traumatic dislocation of the testes. J Trauma. 1982;22:247-9.
5. Schwartz SL, Faerber GJ. Dislocation of the testes, as a delayed presentation of scrotal trauma. Urology. 1994;43:743.
6. Shefi S, Mor Y, Dotan ZA, Ramon J. Traumatic testicular dislocation: a case report and review of published reports. Urology. 1999;54:744.
7. Vasudeva P, Dalela D, Singh D, Goel A. Traumatic testicular dislocation: A reminder for the unwary. J Emerg Trauma Shock. 2010;3(4):418-9.
8. Perera E, Bhatt S, Dogra VS. Traumatic ectopic dislocation of testis. J Clin Imaging Sci. 2011;1:17.
9. Phuwapraisirisan S, Lim M, Suwanthanma W. Surgical reduction in a delayed case of traumatic testicular dislocation. J Med Assoc Thai. 2010;93(11):1317-20.
10. Bromberg W, Wong C, Kurek S, Salim A. Traumatic bilateral testicular dislocation. J Trauma 2003;54:1009-11.

Cite this article as: Saeed Z, Prajna PY, Morang JP. Testis on the move: a rare and elusive case of traumatic testicular displacement to groin. Int Surg J 2025;12:2242-4.