

**A Rare Case of Undescended Testicle Presenting As Incarcerated Inguinal Hernia – A Case Report**<sup>1</sup>Dr Siddhant Singh, Junior Resident, GSVM Medical College, Kanpur, (U.P.), India<sup>2</sup>Dr. Navendu Mohan, Department of General Surgery, GSVM Medical College, Kanpur, (U.P.), India**Correspondence Author:** Dr Siddhant Singh, Junior Resident, GSVM Medical College, Kanpur, (U.P.), India**Type of publication:** Case Report**Conflicts of Interest:** Nil**Abstract**

Inguinal hernias are a common problem all over the world and can affect people of all age groups and gender. Mostly they are uncomplicated and can be easily managed surgically. However, in case of complications arising like irreducibility, incarceration, obstruction or strangulation, the patient requires an urgent surgery. We report a rare case of an incarcerated right inguinal hernia in an elderly male who was explored and was found to be having the undescended right testicle as the content of the incarcerated hernia. The rarity of the case warrants reporting.

**Keywords:** Inguinal Hernias, Elective Surgery, Cryptorchidism.**Introduction**

Inguinal hernias are a common entity, accounting for almost 75% of the abdominal wall hernias, and carrying a lifetime risk of 27% in men and 3% in women.<sup>[1]</sup> Mostly they are small and reducible and may be treated with elective surgery, but often they present in the emergency department with complications owing to long standing nature of the disease, such as severe pain, irreducibility, incarceration, obstruction or strangulation. In such cases they require emergency surgery carrying relatively higher morbidity and mortality. The probability of the hernia getting incarcerated varies in the literature from 0.29% up to 2.9%.<sup>[2]</sup> We present a case of an elderly male presenting

in our emergency department as an incarcerated inguinal hernia later diagnosed as bilateral undescended testes. An undescended testicle being the content of an incarcerated hernia is an extremely rare case and warrants reporting.

**Case Report**

We report the case of a 65 year old male patient, who presented to our emergency department with sudden development of right inguinal pain, which was of severe intensity and was associated with development of a localized swelling in that area. It was not associated with vomiting or other features suggesting intestinal obstruction. On examination the testis could not be palpated separately due to edema in the inguinoscrotal region. On probing, the patient gave history of absence of testis on either side. A provisional diagnosis of a right sided incarcerated inguinal hernia was made and basic routine blood and imaging investigations were performed. The patient was shifted to the emergency operation theatre and was explored. It was found that the right testicle had strangulated at the superficial inguinal ring with edema of the spermatic cord. The testicle was atrophic. There was no bowel or omental content. Right sided orchiectomy was performed followed by right sided herniorrhaphy. The testicle was preserved for histopathological examination. The post operative stay was uneventful and the patient was discharged on the 6<sup>th</sup> day post operatively.

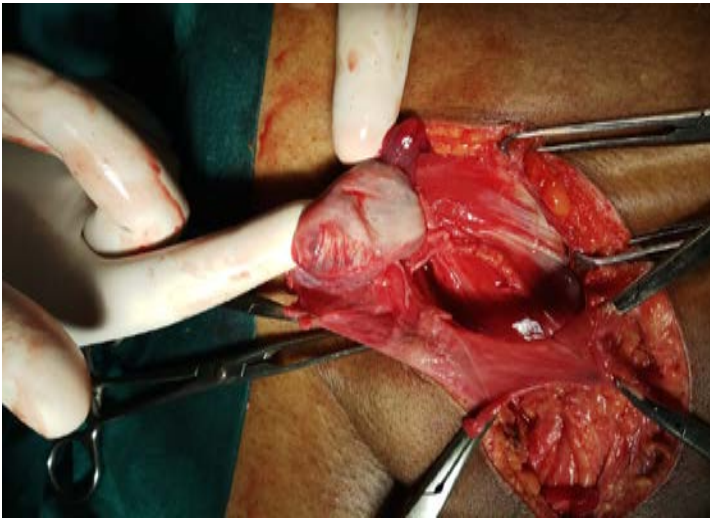


Fig. 1. Right atrophic testicle seen strangulated at the superficial inguinal ring.



Fig. 2. Post operative photograph showing bilateral empty scrotum.

### Discussion

The undescended testicle or *cryptorchidism*, defined as the failure of the testicle to descend into the scrotal position is a common birth anomaly. Estimates range from 1-3% of full term newborn males being affected by one or both testes failing to descend.<sup>[3]</sup> The condition is bilateral in 20-30% of the patients with cryptorchidism.<sup>[4]</sup> Spontaneous testicular descent occurs most commonly prior to six months, and less commonly between 6 to 12 months after correcting for gestational age.<sup>[5][6]</sup> Most cases are diagnosed in the first weeks of life. Watchful waiting is indicated in the first 6 months of life, since spontaneous

descent is likely to occur during this period. In the event of non-descent, treatment should ideally be completed at 12 months of age or 18 months at the latest, either by hormonal and/or surgical modalities. The main complications of late treatment are reduced fertility and increased risk of testicular malignancy.<sup>[7]</sup> Yet in some patients, the diagnosis of an undescended testicle may be missed, especially if the condition is unilateral. We document the case of an elderly male, with bilateral cryptorchidism, presenting to our emergency department as a case of a right sided incarcerated hernia, with the undescended right testicle as the content. Incarcerated hernia is mainly characterized by tenderness at the incarcerated site, followed by whole abdominal pain, bloating, nausea, vomiting, and intestinal obstruction such as absence of bowel movements.<sup>[8]</sup> Occurrence of such an instance in an elderly male is extremely rare, and has been seldom reported in the past. It is possible that the undescended testicle got stuck and strangulated at the superficial inguinal ring due to a sudden increase in abdominal pressure or probably the outcome of a chronic process.

### Conclusion

Although the occurrence of an undescended testicle as an incarcerated hernia is extremely rare, its possibility has to be kept in mind when a patient presents with the above mentioned features. Hence it is imperative to examine the genitalia of the patient also. It is also important to rule out conditions that may mimic this condition like testicular torsion, omental or bowel incarceration. Since the condition is bilateral in this patient it is advisable to explain the risk to the patient of the possibility of occurrence on the opposite side also. Prophylactic orchidectomy may be advised.

## References

1. Jenkins JT, O'Dwyer PJ. Inguinal hernias. *BMJ: British Medical Journal*. 2008;336(7638):269-272. doi:10.1136/bmj.39450.428275.AD.
2. Deeba S, Purkayastha S, Paraskevas P, Athanasiou T, Darzi A, Zacharakis E. Laparoscopic Approach to Incarcerated and Strangulated Inguinal Hernias. *JLS: Journal of the Society of Laparoendoscopic Surgeons*. 2009;13(3):327-331.
3. Sijstermans K, Hack WW, Meijer RW, et al. The frequency of undescended testis from birth to adulthood: a review. *Int J Androl*. 2008;31:1.
4. Kurz D. Current Management of Undescended Testes. *Current treatment options in pediatrics*. 2016;2(1):43-51. doi:10.1007/s40746-016-0039-7.
5. Scorer CG. The Descent of the Testis. *Arch Dis Child*. 1964;39:605.
6. Berkowitz GS, Lapinski RH, Dolgin SE, et al. Prevalence and natural history of cryptorchidism. *Pediatrics*. 1993;92:44.
7. Mathers MJ, Sperling H, Rübgen H, Roth S. The undescended testis: diagnosis, treatment and long-term consequences. *Dtsch Arztebl Int*. 2009;106:527–532.
8. Yang X-F, Liu J-L. Acute incarcerated external abdominal hernia. *Annals of Translational Medicine*. 2014;2(11):110. doi:10.3978/j.issn.2305-5839.2014.11.05.