

Indirect inguinal hernia with cord inside sac (Srinagar Hernia): Case report

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ABSTRACT

INTRODUCTION: Giant epididymal or spermatic cyst, testis and cord as content of sac in an indirect hernia is very rare.

PRESENTATION OF CASE: A 61 year old male with scrotal swelling was diagnosed as a case of giant epididymal cyst. Exploration documented giant epididymal cyst and an indirect inguinal hernia of complete type with the cord, testicle and epididymal cyst as a content of sac. Excision of epididymal cyst with placement of cord outside sac was done. This is the first kind of unique case report with new type of indirect hernia reported with cord as the content of sac named as “Srinagar Hernia”.

CONCLUSION: Giant epididymal cyst is rare. Cord inside sac of indirect hernia is to be made extrasacal to prevent recurrence.

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1. Introduction

Giant epididymal or spermatic cyst or spermatocele is rare to see and can be unilateral or bilateral [1]. Epididymal cyst or spermatocele most frequently occur in the fourth and fifth decades of life in males [2]. Both indirect inguinal hernia and epididymal or spermatic cyst are considered to be of congenital origin. Occurrence of cord, testis and epididymal cyst inside hernia sac is extremely rare. The work has been reported in line with the SCARE criteria

2. Case presentation

A 61 year old male presented with painless swelling of right scrotum of 10 years duration. There was no history of any trauma, orchitis or any inguino-scrotal surgery. Systemic examination was normal. Local examination revealed a large soft, non-tender, non reducible swelling with no expansile cough impulse having free overlying skin and reaching unto base of scrotum. Transillumination test was positive. Scrotal USG showed 371 ml fluid filled unilocular cyst suggestive of the epididymal cyst or spermatocele. Exploration of scrotum revealed a large unilocular cyst arising from rete testis and partially covered by a thin sheath (Figs. 1 and 2). This giant epididymal cyst was dissected from testicle and released of

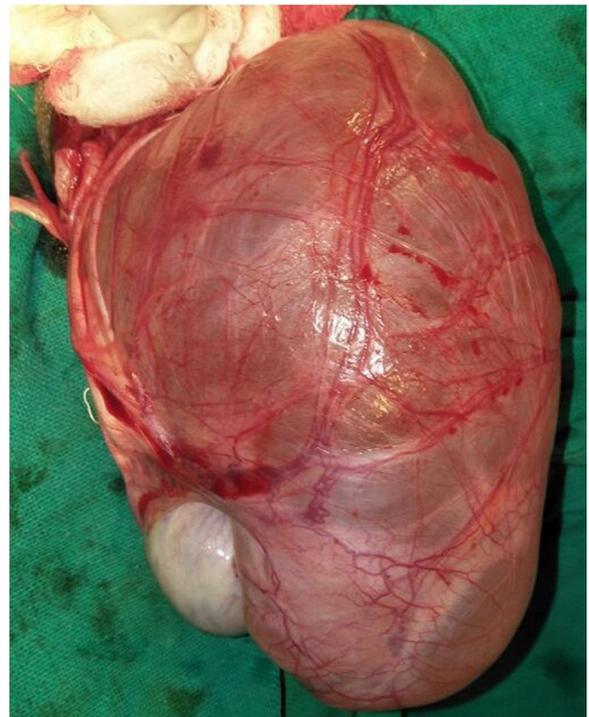


Fig. 1. Showing giant epididymal cyst.

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Abbreviation: USG, ultrasonography.

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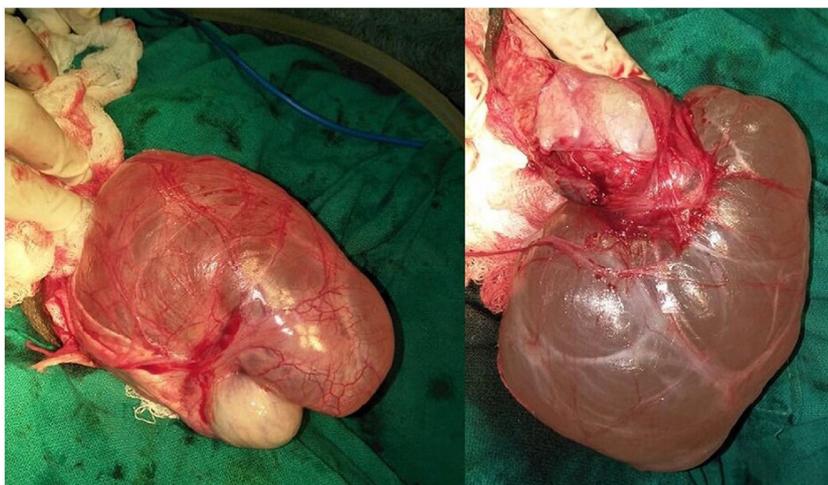


Fig. 2. Showing giant epididymal cyst covered by sac.

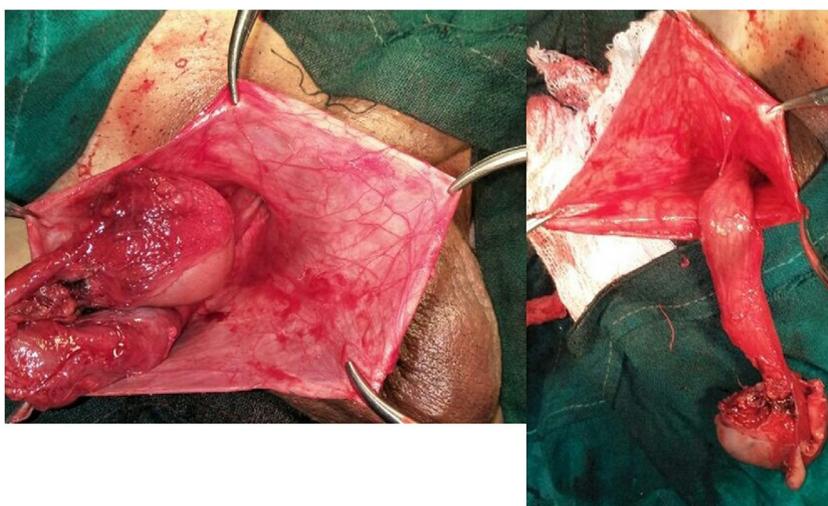


Fig. 3. Showing cord and testis inside sac.

sac. Testicle and spermatic cord were enclosed in this sac like structure and traced to deep ring entering into peritoneal cavity (Fig. 3). Palpation of deep ring admitted index finger with omentum at deep ring. Diagnosis of an indirect hernia of a complete type with cord, testicle epididymal cyst and omentum as a contents was made. Sac was dissected up to deep ring, incised laterally and cord with testicle kept out of sac (Extrasacal) (Fig. 4). Twisting of incised sac with high ligation of sac done and released into peritoneal cavity. Histopathology confirmed diagnosis of epididymal cyst and that of sac of hernia showed fibrous type. Follow up period was uneventful for 2 years.

3. Discussion

Giant epididymal or spermatic cyst or spermatocoele is rare to see. This usually presents as a slowly growing painless unilocular swelling [2]. Development is of idiopathic nature but may be of congenital origin or results from epididymitis, trauma, inguinoscrotal surgery or vasectomy, these leading to scarring, obstruction of proximal efferent ducts and may form an epididymal cyst or spermatocoele [3]. Males whose mothers given the drug diethylstilbestrol (DES) during pregnancy to prevent miscarriage and other pregnancy complications have an increased risk of epididymal cyst or spermatocoele occurrence. Epididymal or spermatic cyst or sper-

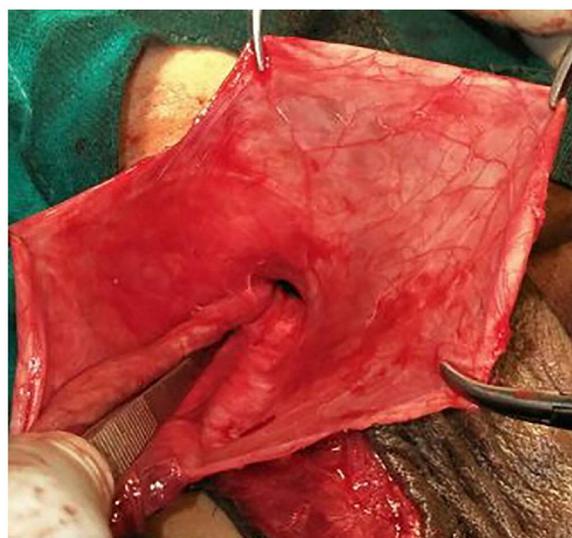


Fig. 4. Showing cord traversing inguinal canal.

matocoele is usually located on the superior aspect of the testicle. This is distinct from hydrocele, which envelops the testis on the anterior and lateral surfaces the testicle but does not displace it. Histopathology shows a lining of a single layer of cuboid, often ciliated epithelium and has thin wall of fibromuscular soft tissue. The cyst contains barley-colored proteinaceous fluid with spermatozoa and cholesterol clefts.

An indirect inguinal hernia is usually a congenital. A patent processus vaginalis and increased cumulative mechanical exposure are risk factors for indirect inguinal hernia occurrence [4]. Aberrant hernia has been suggested to occur due defective regulatory mechanism of hormones, peptides from the genitofemoral nerve and insufficient release of calcitonin gene-related peptide that have an effect on testicular descent [5]. In this case, cord and testis invested by processus vaginalis in embryogenesis failed to disappear altogether after descent. The hernia was itself being complete with internal ring admitting index finger and sac spreading like cone. Arsalan et al. [5] reported an adult case with cryptorchidism in which testis and spermatic cord constitute a component of the indirect inguinal hernia sac but in the present case testis and spermatic cord were content without any cryptorchidism. Cord is to be made extrasacal after incising lateral wall of sac and transfixed high at deep ring to prevent recurrence.

4. Conclusion

Giant epididymal or spermatic cyst is rare. Indirect hernia having cord and testis inside sac is unique. Cord inside sac of indirect hernia is made extrasacal to prevent recurrence.

Conflicts of interest

None.

Sources of funding

None.

Ethical approval

The publication of my article, if the study is exempt from ethical approval in my institution.

Consent

Written and signed consent to publish a case report obtained from patient.

Author contribution

IW made study concept or design, data collection, data analysis or interpretation, writing the paper.

Registration of research studies

NA.

Guarantor

Imtiaz Wani is guarantor and accept full responsibility for the work and the conduct of the study, had access to the data, and controlled the decision to publish.

References

- [1] H. Basar, S. Baydar, H. Boyunaga, E. Yilmaz, Primary bilateral epididymal or spermatic cyst or spermatocoele, *Int. J. Urol.* 10 (2003) 59–61.
- [2] H. Yagi, M. Igawa, H. Shiina, K. Shigeno, T. Yoneda, Y. Wada, Multilocular epididymal or spermatic cyst or spermatocoele: a case report, *Int. Urol. Nephrol.* 32 (2001) 413–416.
- [3] H.C. Yeh, C.J. Wang, C.C. Liu, W.J. Wu, Y.H. Chou, C.H. Huang, Giant epididymal or spermatic cyst or spermatocoele mimicking hydrocele: a case report, *Kaohsiung J. Med. Sci.* 23 (July (7)) (2007) 366–369.
- [4] S. Öberg, K. Andresen, J. Rosenberg, Etiology of inguinal hernias: a comprehensive review, *Front. Surg.* 22 (September (4)) (2017) 52.
- [5] Y. Arslan, K. Karaman, F. Altintoprak, Z. Kahyaoglu, I. Zengin, M.Y. Uzunoglu, DemirH, indirect inguinal hernia sac containing testis and spermatic cord in an adultpatient with cryptorchidism, *J. Surg. Case Rep.* 7 (March (3)) (2014).

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