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Case Study
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A CASE REPORT ON GIANT MULTILOCULATED SPERMATOCELE MIMICKING AS HYDROCELE

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ABSTRACT

Spermatoceles are usually asymptomatic lesions and are often found incidentally during physical examination. We report a case of giant multiloculated spermatocele that mimicked as hydrocele. A 45 years old male suffering from chronic left scrotal enlargement. As the scrotal swelling and pain worsened for last few months, he reported to our outpatient clinic in NSCB ZH Mandi for help. Hydrocele was suspected due to transilluminating appearance of scrotal swelling. Ultrasound examination revealed multicystic lesion with moving echogenic content with in. Histopathological examination revealed multicystic spermatocele with spermatozoa.

KEYWORDS: Giant, multilocular, spermatocele.

INTRODUCTION

A spermatocele is a cystic lesion filled with fluid and spermatozoa arising from rete testis, ductuli efferences or epididymis. Most of the spermatoceles present as small unilocular cystic lesions, however spermatoceles may also present as large, multilocular lesions. We report a case of giant multiloculated spermatocele.

CASE REPORT

A 45 years old male patient presented in the surgery OPD with history of chronic scrotal swelling. The swelling had gradually progressed for the last 5 years with worsening of scrotal pain and swelling for the last

few months. Along with scrotal pain, patient also complained of dragging sensation in left inguinoscrotal region Patient had reported no history of scrotal trauma or vasectomy. On examination, a well-defined ovoid soft mass was palpable without tenderness. The mass was located in upper and posterior part of left testis Transillumination test was positive, indicating cystic lesion. Patient was referred to Department of Radiodiagnosis for imaging analysis. Ultrasonography of the patient revealed multilocular cystic lesion with presence of moving internal echoes "falling-snow sign" [1] away from transducer. Colour doppler shows no abnormal colour flow within the lesion(fig 1).

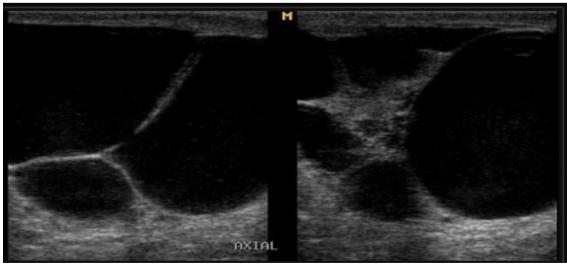


Figure 1: Transverse sonogram of left scrotal sac showing well defined multicystic lesion noted involving left testis.

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Based on above mentioned findings, possibility of spermatocele was kept but possibility of a testicular/epididymal tumour cannot be ruled out. Surgical exploration was performed through a left inguinal approach. Several fluid filled cysts were noted involving rete testis and part of left epididymis which were subsequently removed after testicular biopsy was done (fig. 2)

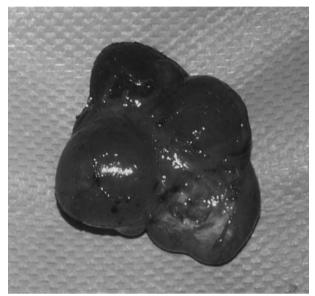


Figure 3: Cystic appearance of resected specimen.

Microscopic examination of the specimen revealed cloudy material with cysts and numerous immobile spermatozoa. Histopathological examination revealed a multicystic spermatocele arising from rete testis (fig. 4). The testicular biopsy ruled out presence of any malignancy.

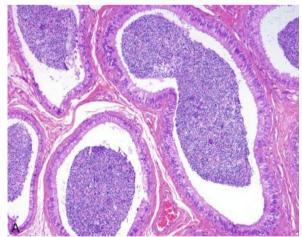


Figure 4: High-power view showed multilocular cysts lined with flat cuboidal epithelium with presence of spermatozoa with in the cyst fluid.

DISCUSSION

The term 'spermatocele' was first coined by Guerin in 1785 to describe an intrascrotal cyst containing semen that complicated testicular inflammation. [2] The entity

presently recognized as spermatocele is the retention cyst of scrotal sac which is or has been in communication with semen carrying system. As most of spermatoceles are < 1cm in size, they tend to be overlooked. Spermatoceles are fairly common with 30% of men show spermatoceles as incidental finding on routine ultrasound. These lesions most frequently affect men in 4th and 5th decade. Sequences

Most spermatoceles, unlike in our case have a simple single cyst, barring few exceptions. [6,7,8] Exact cause of spermatocele remains obscure. Although spermatocele can occur after trauma, infection, vasectomy or inguinoscrotal surgery, they do occur in men without prior history of above mentioned aetiologies. According to hypothesis of Itoh et al⁵, spermatoceles represents proximal dilation after an obstruction of the efferent ducts, probably by the shedding of senile seminiferous epithelium.

Spermatoceles must be differentiated from hydroceles, varicoceles, epididymal cysts, infection or tumours. [9] Chronic epididymitis is thought to trigger secondary neoplastic epithelial changes in rete adenocarcinoma, and may have presentation similar to a typical spermatocele. Most spermatoceles do not require surgery owing to small average size(<1cm).Surgery remains an important viable mode of treatment for symptomatic patients or suspicious cases of malignancy. Increase in size sometimes leads to testicular or torsion pain. Torsion of spermatocele, although rare, often causes severe scrotal pain and require urgent surgical intervention.[10] Definite diagnosis of multiloculated spermatocele is difficult to arrive with history and physical examination alone, as in the present case where surgical/radiological exploration was done. In conclusion, we suggest that such a huge and symptomatic spermatocele should be excised to relieve symptoms and to further rule out malignant changes.

REFERENCES

- 1. Sista AK, Filly RA. Color Doppler sonography in evaluation of spermatoceles: the "falling snow" sign. J Ultrasound Med Off J Am Inst Ultrasound Med, 2008 Jan; 27(1): 141–3.
- 2. Campbell MF. Spermatocele. J Urol, 1928 Oct 1; 20(4): 485–96.
- 3. CLARKE BG, BAMFORD SB, GHERARDI GJ. Spermatocele: Pathologic and Surgical Anatomy. Arch Surg, 1963 Mar 1; 86(3): 351–5.
- 4. Rubenstein RA, Dogra VS, Seftel AD, Resnick MI. Benign intrascrotal lesions. J Urol, 2004 May; 171(5): 1765–72.
- 5. Itoh M, Li XQ, Miyamoto K, Takeuchi Y. Degeneration of the seminiferous epithelium with ageing is a cause of spermatoceles? Int J Androl, 1999 Apr; 22(2): 91–6.
- 6. Yagi H, Igawa M, Shiina H, Shigeno K, Yoneda T, Wada Y. Multilocular spermatocele: A case report. Int Urol Nephrol, 2001 Sep 1; 32(3): 413–6.

www.ejpmr.com Vol 9, Issue 1, 2022. ISO 9001:2015 Certified Journal 494

- 7. Hamm B, Fobbe F, Loy V. Testicular cysts: differentiation with US and clinical findings. Radiology, 1988 Jul; 168(1): 19–23.
- 8. Gooding GA, Leonhardt W, Stein R. Testicular cysts: US findings. Radiology, 1987 May; 163(2): 537–8.
- 9. Rifkin MD, Kurtz AB, Goldberg BB. Epididymis examined by ultrasound. Correlation with pathology. Radiology, 1984 Apr; 151(1): 187–90.
- 10. Jassie MP, Mahmood P. Torsion of spermatocele: a newly described entity with 2 case reports. J Urol, 1985 Apr; 133(4): 683–4.

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