Unilateral Giant Spermatocele Mimicking Accessory Testis: A Case Report

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Abstract: Spermatoceles are usually asymptomatic and are caused due to an acquired or congenital partial obstruction of spermatic ducts. However, an occasional spermatocele may become large enough to bother the patient and surgical intervention should then be considered. We present a case of an unilateral spermatocele mimicking accessory testis in an adult. [Gupta S Natl J Integr Res Med, 2020; 11(3):91-93]

Key Words: Testis, giant spermatocele, encysted hydrocele

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Introduction: A spermatocele is a cystic cavity filled with fluid and spermatozoa probably due to an acquired or congenital partial obstruction of the spermatic ducts. Spermatoceles are usually asymptomatic, single and small in size. Occasionally, a spermatocele may become large enough to bother the patient; differential diagnoses to be then considered are accessory testis, epididymal cyst, encysted hydrocele of cord or tumour. Surgical intervention should be considered if symptoms such as persistent disturbing pain or discomfort to patient are present. We describe a 35 year-old male with giant symptomatic spermatocele; a brief review of literature is also presented subsequently.

Case Report: A 35 year-old adult male presented in the surgical outpatient clinic with complaint of left scrotal swelling separate from ipsilateral testis since childhood. Over the preceding 5 years, the swelling had gradually progressed in size of around 5x4 cm in left hemi-scrotum. He complained of dragging sensation, soreness and even sometimes stretching pain in the left inguinoscrotal region while standing or during abdominal straining. The discomfort had become more evident in the last half an year. During physical examination, ovoid, soft cystic swelling was palpable without tenderness in the upper part of the left scrotum (Figure 1).

The swelling was located superior and posterior to the left testis separately and extended over the spermatic cord. Transillumination test was negative. There was no history of trauma, infection, or inguinoscrotal operation, including vasectomy.Complete blood count and biochemical examinations were normal. An Ultrasound of the scrotum revealed a cyst of size 2.1 X 3.6 X 4.8 cm along the left spermatic cord eccentric to ipsilateral testis and epididymis likely suggesting encysted hydrocele of cord (Figure 2).

Figure 1: Clinical Image With Left Scrotal Swelling Separate From The Ipsilateral Testis.

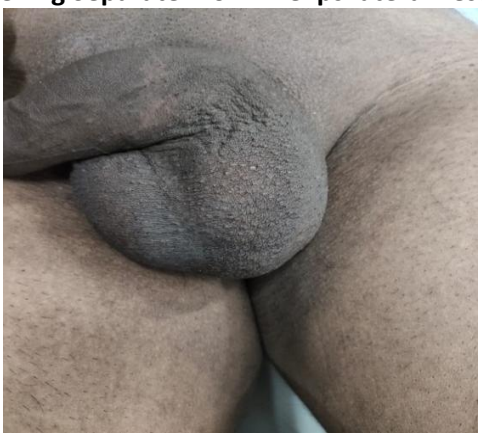
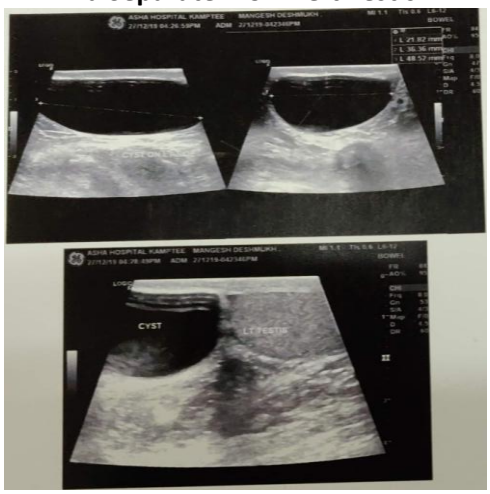


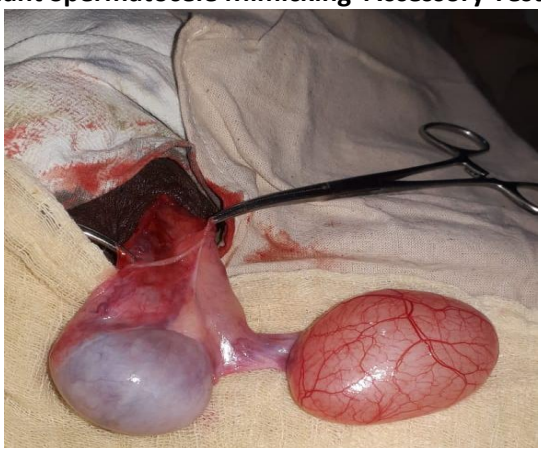
Figure 2: Ultrasound Of Left Testis Suggesting Cyst In Association With Left Spermatic Cord And Separate From Left Testis.



With clinical diagnosis of encysted hydrocele of cord and/or a testicular mass, surgical exploration was performed through a left scrotal approach. A single cystic mass was observed from the spermatic cord to the head of the epididymis mimicking accessory testis. By blunt dissection, the cystic mass was separated gently from the cord and body of the epididymis (Figure 3), and then excised successfully. The plane between the mass and epididymis was clear and the epididymis was preserved. The mass appeared to

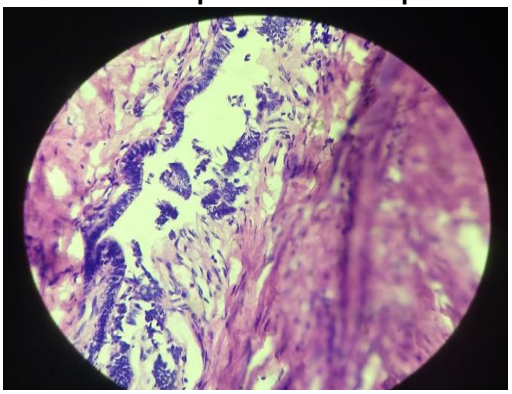
be unilocular and arising from the epididymal body. Its size was 5 × 4 × 0.5 cm. The aspirated fluid was barley coloured. The spermatocele was excised and ligated at the junction of the epididymis and testicle. The testis and epididymis were replaced in the scrotum and incision was closed in layers. The post-operative period was uneventful.

Figure 3: Intra-Operative Image Showing Left Giant Spermatocele Mimicking Accessory Testis



Microscopic examination of the fluid disclosed numerous spermatozoa, most of which were immobile. Histopathologic examination of the specimen revealed cyst lined by cuboidal to columnar epithelium with few spermatozoa in lumen and fibro-collagenous wall of cyst features suggesting Spermatocele (Figure 4).

Figure 4 : Histopathological Image Showing Ciliated Columnar Epithelium With Spermatozoa



Discussion: The term 'spermatocele' was used in 1785 by Guerin. Giant spermatocele is rare entity and usually presents as a slowly growing painless unilocular swelling[1]. Spermatoceles are the sperm-containing cystic dilatations of the efferent ductules in the head of the epididymis. Less commonly, they are dilatations of the tubules of the rete testis or aberrant ducts[2].

Since most spermatoceles are painless and < 1 cm in diameter, they tend to be overlooked[3]. Therefore, the number of reported cases is small and their true incidence is unknown. However, spermatoceles can sometimes be large enough to cause discomfort when walking or when the patients cross their legs. Spermatoceles are fairly common because they are incidental findings in about 30% of men who have ultrasonography of the testes for other reasons[4]. Spermatoceles usually occur in the fourth and fifth decades of life in men[5]. The exact etiology of spermatocele remains unclear.

Etio-pathogeneis of spermatocele is idiopathic; but may congenital origin or results from epididymitis, trauma, inguino-scrotal surgery or vasectomy, these leading to scarring, obstruction of proximal efferent ducts and may form a spermatocele[6]. Males whose mothers received diethylstilbestrol (DES) during pregnancy to prevent miscarriage and other pregnancy complications have an increased risk of spermatocele occurrence.

According to the hypothesis of Itoh et al[5], spermatoceles represent proximal dilation after an obstruction of the efferent ducts, possibly caused by the shedding of senile seminiferous epithelium. This shedding occurs normally throughout life, but the cells may accumulate and cause a blockage in older men, which may explain why the incidence of spermatoceles tends to increase with age. Most spermatoceles, as in our case, have a single simple cyst. Because of a high association with tubular ectasia of rete testis, multilocular cysts are postulated to derive from the histologic structure of the rete testis, forming irregular anastomosing spaces arising from the tubuli recti[8]. More commonly, ultrasound is used to confirm the diagnosis. Ultrasonography usually reveals well-defined hypoechoic lesions generally 1–2 cm in size with posterior acoustic enhancement[10]. Spermatoceles must be differentiated from hydroceles, varicoceles, epididymal cysts, infection or tumors[11].

A spermatocele often lies on the posterolateral border of the testis and does not fluctuate in size upon provocative maneuvers[9]. Urinalysis is indicated to exclude genitourinary tract infection. Demonstration of sperm in cystic fluid could distinguish it from an epididymal cyst. In addition, other uncommon conditions may be taken into consideration. Chronic epididymitis is speculated

to trigger secondary neoplastic epithelial changes in rete testis adenocarcinoma, and may have similar presentation as a typical spermatocele[12]. Torsion of a spermatocele, which is rare, often causes severe scrotal pain and requires surgical intervention[13].

Most spermatoceles do not require any treatment. Those that become large, those that cause bothersome discomfort, or those that are difficult to distinguish from neoplasm can be surgically excised. Definite diagnosis of a giant spermatocele is difficult based on history and physical examination alone. In the present case, surgical exploration was recommended. In conclusion, we suggest that such a huge and symptomatic spermatocele should be excised to relieve the symptoms.

Available literature reveals only individual case reports wherein the spermatoceles presented with clinical scenarios mimicking malignant/ benign testicular/paratesticular lesions[1,2,3,6,11,12]. Basar et al reported a case of primary bilateral spermatocele in 2003[1].Multilocular spermatocele have been reported by Matsuoka et al, Yagi et al and Lee et al in individual case reports[7,8,9]. Jassie et al reported torsion in giant spermatocele[13].

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