

Case Series on Bilateral Epididymal Cyst

Dr. Kshitija Kamble¹, Dr. Jignesh P. Dave², Dr. Hetvi Marsonia³

¹Junior Resident, Department of General Surgery, P.D.U. Govt. Medical College and Civil Hospital, Rajkot
Corresponding Author Email: [kshitijakamble29\[at\]gmail.com](mailto:kshitijakamble29[at]gmail.com)

²Associate Professor, Department of General Surgery, P.D.U. Govt. Medical College and Civil Hospital, Rajkot

³Junior Resident, Department of General Surgery, P.D.U. Govt. Medical College and Civil Hospital, Rajkot

Abstract: Epididymal cyst are usually found in middle aged people and are often bilateral. They are very common, usually multiple and vary in size at presentation. They represent cystic degeneration of epididymis. They are usually separate from the testis on palpation. Aetiology of these cysts is cystic degeneration of remnants of paramesonephric or Müllerian duct or hydrated of morganite and remnants of mesonephric duct or wolffian duct. Here we report a bilateral epididymal cyst in a 37 yr old male patient.

Keywords: epididymal cyst, bilateral epididymal cyst

1. Case Report

Case 1

Patient presented to surgery department of P.D.U. Hospital, Rajkot on 25th august, 2022 with complaints of swelling over bilateral scrotal regions associated with pain for a month. Swelling had increased in size gradually over a period of 1 month and pain had increased in intensity to become moderate to severe. Pain was insidious in onset and gradual in progression and dragging in nature. There were no aggravating and relieving factors. Swelling did not decrease in size on lying down position. There were no history of fever, burning micturation, difficulty in micturation, constipation

On examination,

There were two well defined oval shaped swellings of size 3×3cm on right and 5×5cm on left scrotum with bilateral testes separately visible and cord structures separately palpable, soft in consistency, fluctuant and minimally tender, transillumination was present. No localised rise in temperature, no expansile cough impulse ultrasonography of scrotal region suggestive of bilateral few epididymal cysts with largest one measuring 3.5×3cm on right and 5×5cm on left side along with bilateral minimal hydrocele and all blood investigations were within normal limits

Excision of bilateral epididymal cyst was done under spinal anaesthesia

Histopath report of cystic Wall was consistent with diagnosis of epididymal cyst



Case 2

Patient presented to surgery department of P.D.U. Hospital, Rajkot on 29th august, 2022 with complaints of swelling over bilateral scrotal regions associated with pain for 4 months. Swelling had increased in size gradually over a period of 1 month and pain had increased in intensity to become moderate to severe. Pain was insidious in onset and gradual in progression and dragging in nature. There were no aggravating and relieving factors. Swelling did not decrease in size on lying down position. There were no history of fever, burning micturation, difficulty in micturation, constipation

On examination,

There were 3 well defined oval shaped swellings of size 1.5×1cm and 1×1cm on right and 1×0.5cm on left scrotum with bilateral testes separately palpable and cord structures separately palpable, soft in consistency, fluctuant and minimally tender, transillumination was present. No localised rise in temperature, no expansile cough impulse ultrasonography of scrotal region suggestive of bilateral 3

Volume 12 Issue 3, March 2023

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epididymal cysts with largest one measuring 1.5×1cm on right and 1×0.5cm on left side and all blood investigations were within normal limits

Excision of bilateral epididymal cyst was done under spinal anaesthesia

Histopath report of cystic Wall was consistent with diagnosis of epididymal cyst



2. Discussion

Epididymal cysts are unilocular or multilocular collection of fluid in the epididymis as a result of dilatation of efferent epididymal tubules due to tubular obstruction. A study found that local production of proinflammatory cytokines like interleukin 8 (IL-8), interleukin 6 (IL-6) in epididymal cyst is responsible for cyst formation. They usually develop in adult men and mostly unilateral. Although uncommon in pediatric patients, they can be found in a number of boys in puberty. Bilateral epididymal cysts are less frequent. In our case, the patient was 37 years old and had bilateral epididymal cysts. However, they can be symptomatic or not with different clinical presentations such as scrotal swelling which may be narrated by the patient as third testicle; they can present with testicular pain or orchalgia; they can be incidentally found during physical examination or detected on scrotal ultrasound examination. Clinically, epididymal cysts are palpated as extratesticular masses usually smooth, 6 round, and characteristically located within the

epididymis. These epididymal cysts are usually translucent as they contain clear fluid but few due to the presence of spermatozoa may have turbid fluid.

Ultrasound examination is helpful in locating the cyst within the epididymis. The most common site of origin is the head of epididymis but can rarely arise from body and tail. Ultrasonographic appearance of epididymal cyst is similar to those of cystic tumors such as adenomatoid tumor of epididymis, epidermoid cyst (monodermal teratoma) of the testis. They should also be considered as differential diagnosis. Epididymal cyst has also been associated with conditions like polycystic kidney disease, cystic fibrosis, Von Hippel-lindau disease and also reported in children exposed to diethylstilbestrol in utero life.

Treatment for epididymal cysts includes conservative management, aspiration of cyst, sclerotherapy, and excision of cyst. Conservative management has been suggested in most cases although there is no consensus about the most adequate therapy of pubertal patients and the majority of these cysts involute with time. The average time to complete involution varies from 4 to 50 months. A study reported that no spontaneous resolution was observed in the group of patients with cysts between 21 and 50 mm over a 1-year follow-up period. However, if they become symptomatic, suddenly start increasing in size, or do not resolve spontaneously, nonconservative management should be considered such as surgery or sclerotherapy.

Cyst	Treatment
Single large cyst	Excision of cyst
Recurrent or multilocular cyst	Excision followed by epididymectomy
Spermatocele	If big do aspiration or excision If smaller, no intervention

3. Conclusion

Surgical modality is the only mainstay of treatment for patients with acute symptomatology like intractable scrotal pain, swelling, and redness and also when the size of the cyst does not regress on its own instead increases with time. From this case presentation, it is concluded that while dealing with the cases of small-to- medium scrotal swelling or small hydrocele, epididymal cysts should always be kept into consideration as a differential diagnosis.

Conflict of interest: Nil declared

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