

A case of a scrotal mesenteric cyst

Skrotal mezenterik kist olgusu

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ABSTRACT

Mesenteric cysts are rarely seen intraabdominal mass lesions which can manifest themselves with different clinical signs, and symptoms. They can locate in the mesenterium from duodenum down to rectum, and also in the retroperitoneal space. Herein we present a very rare case of a scrotal mesenteric cyst which resembled an epididymal cyst in a 6-year-old boy. Ultrasonographic examination revealed a multiloculated cyst completely filling the scrotal sac, and the cyst was excised surgically. Histopathological examination described the surgical specimen as chylolymphatic mesenteric cyst, and during one year follow-up any recurrence was not observed.

Key words: mesenteric cyst, scrotal mass, chylolymphatic cyst

ÖZET

Mezenterik kistler oldukça nadir görülen intra abdominal kitleler olup, farklı klinik bulgular ve semptomlar ile ortaya çıkabilmektedirler. Mezenter içinde duodenumdan rektuma kadar ve retroperitoneal olarak yerleşebilmektedirler. Bu vakada 6 yaşında erkek çocukta epididim kistini taklit eden, çok nadir görülen skrotum yerleşimli mesenterik kist olgusunu sunuyoruz. Ultrasonografide skrotumu dolduran multiloküle kist tesbit edilen hastada, kist cerrahi olarak eksize edildi. Histopatolojik değerlendirmesi şilolimfatik mesenterik kist olarak tanımlanan hastanın bir yıllık takibinde herhangi bir nüks tesbit edilmedi.

Anahtar kelimeler: Mezenterik kist, skrotal kitle, şilolimfatik kist

INTRODUCTION

Mesenteric cysts are rarely seen intraabdominal masses which demonstrate different clinical signs, and symptoms [1]. They are generally benign lesions, and their incidence has been reported to be 1/100.000 in adults, and 1/20.000 in children [2]. Mesenteric cysts can be seen in the mesentery of bowel segments extending from duodenum, down to rectum. As cited in the literature, nearly half of the reported cases are localized in the small intestines, and generally near to the duodenum. However retroperitoneal and omental mesenteric cysts were also reported [3].

Mesenteric cysts are divided into 6 groups based on their histopathological features as [4] cysts originating from: 1. Lymphatic tissue (simple lymphatic cyst and lymphangioma) 2. Mesothelium (simple mesothelial cyst, benign or malign cystic mesothelioma) 3. Intestines (enteric cyst and enteric

duplication cyst) 4. Urogenital structures 5. Mature cystic teratoma (dermoid cysts) 6. Pseudocysts (infectious, and traumatic cysts). Among them, most frequently, cysts of lymphatic, and mesothelial origin are encountered. Cysts can contain chylous, serous or even hemorrhagic material. In this paper, we aimed to report an isolated scrotal mesenteric cyst in a 6-year-old boy.

CASE REPORT

Family of a 6-year-old boy consulted to the outpatient clinics of urology because of a gradually increasing scrotal mass in their child within one year. His medical history did not reveal any previous scrotal trauma or surgery. On his physical examination, a cystic mass filling the left side of the scrotum measuring nearly 6 x 7 cm was palpated. Left testis was located separately and inferior to the mass. His urine, and biochemical test results, and whole blood

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Geliş Tarihi / Received: 25.09.2013, Kabul Tarihi / Accepted: 07.10.2013

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counts were within normal limits. On his scrotal sonographic examination, a septated, cystic mass located in the left side of the scrotum with dimensions of 6 x 7 cm was detected. Whole abdominal ultrasonographic examinations were unremarkable. Surgical exploration was planned with initial diagnosis of epididymal cyst.

General anesthesia was preferred for surgical exploration. Through a left inguinal incision scrotal sac was entered. Cystic mass was separated from scrotum, and testis with blunt, and sharp dissection, and taken out. During the surgical excision, unusually easy separation of the mass from surrounding structures with blunt dissection, lack of any link-

age with testis, and epididymis, and termination of the cyst in the upper inguinal region without any communication with any structure were noted as remarkable findings (Figure 1). A penrose drain was placed inside scrotum, and incised layers were closed with appropriate sutures, and then the surgical procedure was terminated. On the postoperative first day, penrose drain of the patient was removed, and the patient was recovered without development of any complication. Histopathological evaluation disclosed a mesenteric cyst, resembling a thin walled chylous cyst with an endothelial lining (Figure 2).

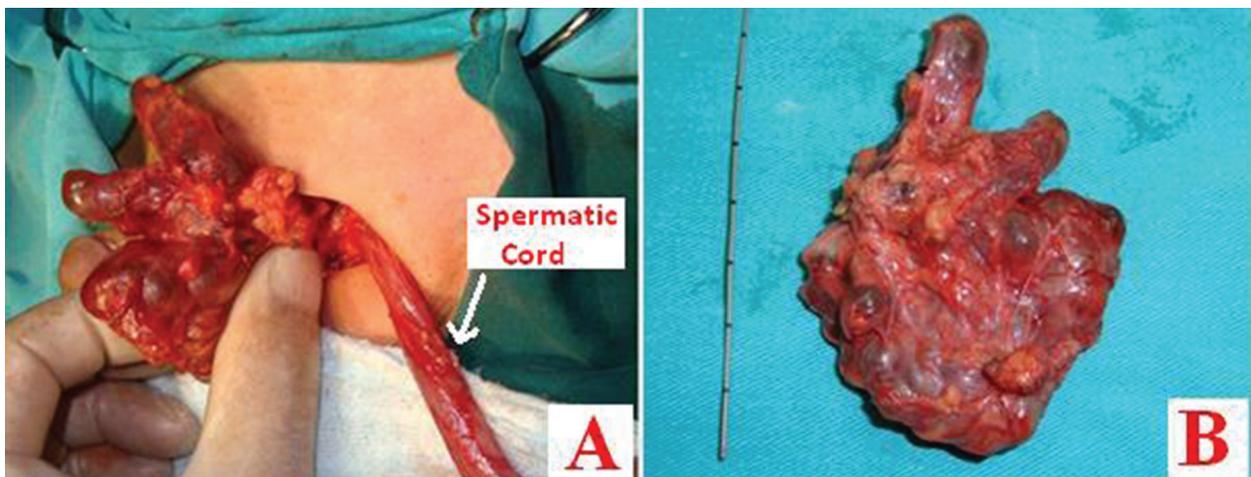


Figure 1. A: The cyst ends separately from the spermatic chord via inguinal incision. **B:** Multiloculated cyst

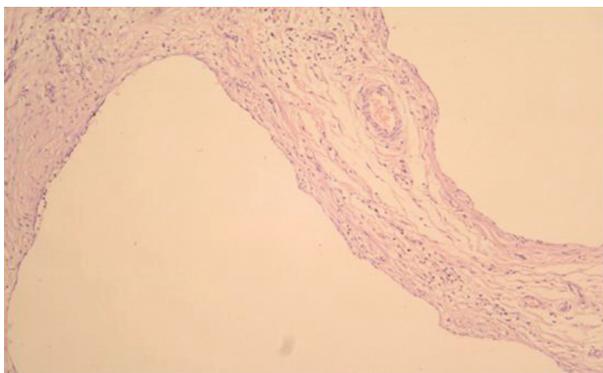


Figure 2. Mesenteric cyst resembling chylous cyst with a thin wall and lined by endothelium (H&E stain, x100)

DISCUSSION

Mesenteric cysts are seen in only 1 of 27.000-250.000 referrals to hospitals [4]. It was reported in all age groups, and encountered in 75 % of adult,

and 25 % of pediatric cases [2]. Some confounding factors involve in the definition, and classification of mesenteric cysts Omentum, mesentery, and all retroperitoneal membranes develop from the same embryologic origin. These anatomical structures which extend from posterior wall of the abdomen are formed of two layers which contain adipose, connective, and musculo-nervous tissue, and carry blood, and lymph vessels of the abdominal organs. Cysts which develop in these tissues are described as mesenteric cysts [5].

Mesenteric cysts are largely asymptomatic. Rarely, they can manifest themselves with signs of abdominal distension, pain or mass. On the other hand, they can confront us with many complications as torsion, intestinal obstruction, bleeding, infection, rupture, and compression on adjacent organs [6].

Rattan et al published a series of 8 cases aged between 18 months and 10 years whose cysts were defined histopathologically as chylolymphatic cysts. Abdominal swelling was detected in all these cases, and their physical examination revealed a palpable abdominal mass in 5 cases. Symptoms of acute intestinal obstruction (n=2), and abdominal pain (n=2) were prominent in 4 cases. They reported that all cases were laparotomized, and multiloculated cysts with diameters ranging between 8 mm, and 9 cm localized on the mesentery of the small intestine were detected [7]. Ghazimoghadam et al published a case report of a 19-year-old healthy male patient who had complained of an urgent urinary retention caused by a mesenteric cyst. Following resection of the mesenteric cyst, the patient had completely relieved of his urinary complaints [1]. Okur et al in their study including 10 pediatric cases, reported that their patients referred frequently with symptoms of abdominal swelling, and pain at admission to the hospital, and they had detected a palpable abdominal mass in 4 patients [3]. They had performed laparotomy, and cyst excision in all cases, and detected intestinal mesenteric (n=6), retroperitoneal (n=2), omental (n=1), and mesosigmoidal (n=1) cysts. In our case a painless mass filling the left side of the scrotum was present which was diagnosed as multiloculated cyst on US.

Mesenteric cysts are managed by surgical excision. Although successful cases of laparoscopic

cystectomy were reported in the literature, total cystectomy by open surgery is preferred more frequently [7]. Excluding operational risks, prognosis is relatively good with lower recurrence rates [3]. In our case, any evidence of recurrence was not observed in none of our patients during one year of follow-up period.

Rarely mesenteric cysts involve scrotum primarily, however this benign abnormality should be kept in mind in the evaluation and differential diagnosis of scrotal masses encountered in the pediatric age group.

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