Mesenteric Cyst- An Unusual Presentation as Inguinal Hernia

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Received: 12 November 2008 / Accepted: 21 July 2009 / Published online: 14 April 2011
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Abstract Mesenteric cyst is one of the uncommon childhood tumors. Mostly they are asymptomatic. Some of them present with non specific abdominal symptom like chronic abdominal pain very rarely they present as acute abdomen like torsion or intestinal obstruction. We are reporting a very rare presentation of Mesenteric cyst as an irreducible inguinal hernia.

Keywords Mesenteric cyst · Inguinal hernia

Introduction

Mesenteric cysts are usually asymptomatic and incidentally detected during physical or radiological examination or when a complication develops. There are no pathognomic sign of mesenteric cyst. The usual presentation in children is abdominal lump presenting insidiously or rarely as acute abdomen. Acute presentation is very rare and it is mostly in form of intestinal obstruction or rupture of cyst or hemorrhage.

We are reporting a case of mesenteric cyst presenting as irreducible inguinal hernia which is very rare and in our best knowledge only five cases has been reported till now [1, 2].

Case Report

A two and half year old male child who was a known case of left inguinal hernia presented with irreducible swelling and pain in abdomen with no symptoms of obstruction. General condition was satisfactory; vital signs were normal. The abdominal examination revealed mild distension in left lumbar and left inguinal region. On palpation lump was found to be present in left inguinal, left lumbar, umbilical and hypogastric region which was extending into left scrotal (Fig. 1). It was irreducible, firm in consistency and was non-tender. A tense swelling was palpable on left side on per rectal examination. An erect X ray of abdomen showed soft tissue shadow in left lower abdomen but there was no air-fluid level.

Ultrasonography showed distended pelvic colon herniating as a content in left inguinal region. Colour Doppler done to see vascularity of herniating bowel showed an avascular mass along with pelvic colon in the hernial sac. Immediate exploration was done through left transverse infraumbilical incision, large cyst was found of about size of 20×15 cm in mesentery of pelvic colon extending from lower pole of left kidney to tip of left testis (Fig. 2). Left ureter was found to be adhered on posterior aspect of mass. Cyst had hemorrhagic contents. Aspiration was done to decompress the cyst, followed by complete excision of cyst without resecting the bowel. Histopathology showed cuboidal epithelial lining with no muscular layer. Postoperative was uneventful and till date there is no complaint in follow up.

Discussion

Mesenteric cyst was first recorded in an autopsy by Florentine anatomist Beneviene in 1507. Beahrs et al. classified cystic disease of mesentery into four categories

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Fig. 1 Clinical photograph of the patient showing abdominal lump extending in the scrotum

(1) Embryonic and developmental cyst (2) Traumatic or acquired cyst (3) Neoplastic cyst (4) infective or degenerative cyst. Most accepted theory of development of mesenteric cyst is benign proliferation of ectopic lymphatic in the mesentery that lack communication with remainder of the lymphatic system [3].

Mesenteric and omental cyst are rare disease and their incidence is 1 in 20000 admissions to a paediatric hospital. Most of the mesenteric cyst remain asymptomatic and up to 40% are diagnosed incidentally during surgery. Some of them may present as chronic abdominal pain. About one third present as acute abdominal condition like intestinal obstruction, volvulus, rupture of cyst [4, 5]. Out of these one third patients with acute presentation; two third are pediatric patient. Mesenteric cyst presenting as irreducible hernia is a very unusual case. Only five cases of mesenteric cyst presenting as inguinal hernia are reported in English literature. The first case was reported in 1960 by Harkin and Sabiston, second in 1965 by Hopman, third by Katka and Novak in 1970, fourth by Popli et al. in 1994 and last case was reported by Mohanty SK in 1998 [1, 2, 6]. Of these five cases reported in literature four had insidious presentation and one had acute presentation. Mohanty SK reported a case of right reducible inguinal hernia since birth which presented with pain and irreducibility, which on exploration was found to be cyst arising from small bowel mesentery. Compared to this our case presented with left inguinal hernia with palpable abdominal lump which on exploration was found to be cyst arising from mesentery of descending colon. Cyst arising from mesentery of descending colon is rare as compared to that arising from mesentery of small intestine.

Fig. 2 Peroperative photograph showing cystic lesion (evacuated) arising from pelvic mesocolon

In all these five reported cases diagnosis were made only on exploration. Even with high index of suspicion supplemented with proper investigation like ultrasonography, computed tomography (CT) scan preoperative diagnosis can be made in only 25% of cases [1]. In acute presentation all of these investigations may not be required as ultrasonography can give probable anatomical diagnosis. In our case we did not resorted to any further investigation because mass was already palpable in the abdomen which was herniating in the scrotum. The ultrasonography and Colour Doppler done in our case showed pelvic colon in the herniating sac with avascular mass, so patient was directly explored without further investigations. Mesenteric cyst is known for recurrence if incomplete excision is done therefore complete excision is treatment of choice which we were able to do in this case.

Reference

1. Mohanty SK, Bal RK, Maudar KK (1998) Mesenteric cyst—an unusual presentation. *J Pediatr Surg* 33(5):792–793
2. Popli MB, Garg DP, Anand R et al (1994) Retroperitoneal lymphangioma presenting as an inguinal Hernia. *Indian Pediatr* 31:1574–1575
3. Gross RE (1953) *The surgery of infancy and childhood*. WB Saunders Co, Philadelphia, Pa, pp 377–383
4. Hebra A, Brown MF, McGeehin KM et al (1993) Mesenteric, omental and retroperitoneal cyst in children- A clinical study of 22 cases. *S Med J* 86:173–176
5. Vanek VW, Philips AK (1984) Retroperitoneal mesenteric and omental cysts. *Arch Surg* 119:838–842
6. Harkin GA, Sabiston DC (1960) Lymphangioma in infancy and childhood. *Pediatr surg* 5:811–822