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A RARE CASE OF INTESTINAL OBSTRUCTION IN NEONATE: MESENTRIC DERMOID CYST

General Surgery

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ABSTRACT

Mesentric cyst is rare intrabdominal lesion , most commonly occurring in children < 10 yr . These cyst can occur in any part of mesentry from duodenum to rectum and had varied presentations . Mesentric dermoid are unusual type of mesenteric cyst and only few cases has been reported in literature till now .

We present a rare case of 17 day neonatal intestinal obstruction for which exploration was done and mesenteric dermoid cyst was diagnosed as a cause of intestinal obstruction.

KEYWORDS

Mesentric cyst , Dermoid cyst , Intestinal obstruction , Cystic lesion

INTRODUCTION :

Intrabdominal cystic swellings are common in newborns and children. (1) Italian anatomist Beneveni , first described the mesenteric cyst following an autopsy on 8 yr old girl in 1507 .

In 2008 , DeParrot etal (2)suggested a classification for mesentric cyst on histopathological features .(a) Cyst of lymphatic origin (simple lymphatic cyst and lymphangioma) (b) Cyst of mesothelial origin (simple mesothelial cyst) (c) Cyst of enteric origin (enteric cyst and enteric duplication cyst) (d) Cyst of urogenital origin (e) Mature cystic teratoma (Dermoid cyst) (f) Pseudocyst (infectious and traumatic cyst) .

Dermoid cyst (mature cystic teratoma) is a sac like growth that is present at birth . These usually occur on face , skull , on lower back , and in ovaries and can also occur intrabdominally . Dermoid cyst originate from totipotent germ cells contain developmentally mature skin with its accompanying structure : hair follicle , sweat gland, teeth , bone ,nails , thyroid tissue, eye and cartilage .

The presentation of dermoid cyst is very unusual . These cyst can present asymptomatically or intestinal obstruction (3) , volvulus (4) , or rupture .

Sophisticated imaging as US , CECT, MRI scans can even made the antenatal diagnosis of these cysts but actual diagnosis is based on histopatholically. (5,6)

We can aspirate and enucleate these cyst laparoscopically . But , in emergency situation as intestinal obstruction in new born we have to explore the abdomen to relieve the obstruction without waiting for the imaging and fine laparoscopic techniques (7,8)

CASE REPORT :

17 days old male newborn presented with abdominal distention since birth . He was not able to take breast milk adequately . Hemodyanamically he was stable and afebrile .Abdomen was distended , with dilated veins present over the abdominal wall . Fluid thrill was present .

Hb – 14.6 , TLC 23,000/MM3 and all other investigations were within normal limits . X Ray abdomen showed cystic swelling in abdomen ? mesenteric cyst ? duplication cyst . He was managed conservatively for 2 days ,than Exploratory laparotomy and complete encleation was done . Intraoperative, large cyst was present in abdomen arising from the mesentry of transverse colon extending upto the lessor sac , sigmoid colon , and right hepatic flexure and bladder . Cyst wall was thickend and pearly white in color and filled with dirty white yellow cheese material and serous fluid . Cyst was adherent to the posterior wall of stomach , right lobe of liver and hepatic flexure , sigmoid colon and urinary bladder . Adhesiolysis was done to enucleate the cyst from the adjacent structure of the abdomen . Minimal interbowel adhesions were also present that were released and bowel was found to be viable. Two drains were placed in abdomen and abdominal wall was closed with 1-0 vicryl . Postoperatively patient did well and allowed orally on 4 th day . Gradually patient condition improved and drain were removed when drain our put were minimal . Histopathological reports of cyst showed acute on chronic organised inflammation with giant cell reaction and calcification , few embedded crosssections of hair shaft were also noted . suggestive of mesenteric dermoid cyst .

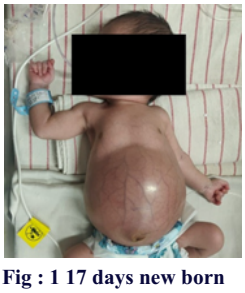

Fig : 1 17 days new born

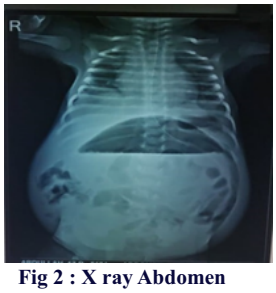

Fig 2 : X ray Abdomen showed large cyst

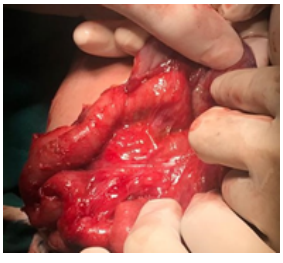

Fig 3 : Cyst was adherent to transverse

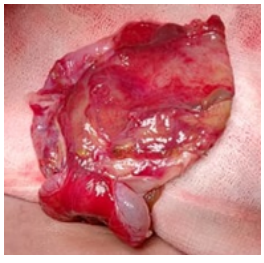

Fig 4 : Excised cyst Colon

DISCUSSION : Mesentric cyst had varied location. In a thorough review of 162 cases reported between 1950 and 1985, Kurtz and colleagues found that 60% of mesentric cyst were located in the small bowel mesentery, 24% in the large bowel mesentery, and 14.5% in the retroperitoneum. The most common location is in the ileal mesentery. In the colonic mesentery, cysts occur most commonly in the sigmoid mesocolon

The differential diagnosis of mesenteric cysts is omental cysts , ovarian cyst, lymphangioma, entricduplication cyst.(9,10). The differentiation between intestinal duplication cysts and mesenteric cysts may be problematic because both are often intimately associated with the bowel wall. The former share a common blood supply and muscular layer with the adjacent bowel and have a well-defined mucosal layer that mesenteric cysts lack. At the time of surgery, duplication cysts require resection of the involved bowel, whereas mesenteric cysts can often be enucleated from between the leaves of the mesentery.

In this case peroperatively our diagnosis was duplication cyst as the cyst was adherent to the interbowel loops but not had been supplied by the mesentric vessels and we were able to completely enucleate the cyst from mesentry . Thus our final diagnosis was mesenteric cyst.

We even surprised with the pathological result that confused our final diagnosis. In our case the pathological diagnosis was dermoid mesentric cyst.

CONCLUSION :

Intestinal obstruction is a surgical emergency requiring an exact diagnosis and treatment.Mesenteric cysts are rare intra-abdominal benign tumors without any characteristic clinical findings (DePerrot et al., 2000) . Mesenteric cysts have an identical pathogenesis, but may have different histopathological derivation and structures. Treatment of mesenteric cyst is indicated if it becomes symptomatic as a result of the enlargement of cyst or complications (7) . Cysts wall has to be excised in toto to prevent the recurrence.(8)

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CONFLICT OF INTEREST : There are no conflict of interest

REFERENCES

1. Vijayabaskaran.S, Raghul M, Rajamani .G Abdominal Cystic Disease of The Neonates – Asystemic Review .IOSR Journal of Dental and Medical Sciences 2018 ; 17(7) : 07-12
2. De Parrot M,Brundler M , TotschM, Mentha G etal Dig Surg 2000; 17(4): 323-8
3. Goodarzi R, Housemandi M.M . Neonatal Intestinal Obstrction due to Mesentric Cyst Ascian J.Med.Pharm Res2013 3(2): 55-57,
4. Kumar S, Varty G , Large Intraabdominal Dermoid Cyst Presenting as Small Bowel Volvulus .Int Surg J. 2017 ;4: 3188-9
5. Chang –YU Tu Ultrasound and Differential Dignosis of Fetal Abdominal Cysts , Experimental and Theruptic Medicine 2017 ; 13 ; 302-306
6. Milikovic D, GamicovicD, RadojKovic M, Gliogorijevic J et al Mesentric Cyst Arch Oncol 2007 ; 15(3-4) : 91-3
7. Raghupathy RK, Krishnamuthy P , Rajmani G, Gurunathan S, Natarajan M etal Intraabdominal cystic swelling in Children – Laparoscopic Approch , Our Experience. J Indian Associa Paediatric Surg Oct –dec 2003 ; 8 : 213-217.
8. Belhassen S, Meriem B, Rachida L , Nahla K, A Nouri et al .Mesentric Cyst in Infancy : Presentation and Management Pan African Medical Journal 2017 ; 26: 191
9. Iijima Shigeo A Wandering Abdominal Mass in A Neonates : An enteric Duplication Cyst Mimiking a Ovarian Cyst . Case Report in Paediatrics Vol. 2017; Article ID 9209126 , 4 pages
10. Richard R.Ricketts in Paediatric Surgery 7 th Edition , 2012 Page no -1165