

# Mesenteric cyst leading to intestinal obstruction

Sangita M Gavit<sup>1</sup>, Ajay D Subhedar<sup>2\*</sup>

<sup>1</sup>Assistant Professor, <sup>2</sup>Associate Professor, General Surgery, Shri Bhausaheb Hire Government Medical College, Dhule, Maharashtra, INDIA.

Email: [subhedarajay74@gmail.com](mailto:subhedarajay74@gmail.com)

## Abstract

We present a case of a huge mesenteric cyst successfully removed surgically. A 2 year old male child presented with pain and distension of abdomen, with vomiting and clinical features reveals intestinal obstruction. The Patient under went laparotomy for intestinal obstruction and discover a huge cystic mass and that's - mesenteric cyst. Cyst was resected along with a part of the bowel loop where it was inseparable from the cyst, with easily, safely and successfully.

**Keywords:** Mesenteric cyst, Intestinal obstruction, bowel loop.

## \*Address for Correspondence:

Dr. Ajay D Subhedar, Associate Professor, Department of General Surgery, Shri Bhausaheb Hire Government Medical College, Dhule, Maharashtra, INDIA.

Email: [subhedarajay74@gmail.com](mailto:subhedarajay74@gmail.com)

Received Date: 03/05/2015 Revised Date: 14/05/2015 Accepted Date: 16/05/2015

## Access this article online

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DOI: 18 May 2015

## INTRODUCTION

Mesenteric cyst can occur anywhere in the mesentery of GIT. It is encountered most frequently in the 2nd decade of life, less often between the age of 1 to 10 years and very rarely in infants under 1 year. Generally Mesenteric cysts are classified as four types -1) chylolymphatic, 2) enterogenous, 3) urogenital remnant, 4) dermoid (teratomatous cyst) Its incidence, in a review of series of 162 patient, as per literature 60% occurred in small bowel, 24% in large bowel, 14% retroperitoneum and is about 1 per 20000 admission. In literature 830 cases have been reported and 1/3 cases reported below 15 year

## CASE REPORT

A 2 year old male child referred from rural hospital to the Government Medical College, Dhule. With chief complain of pain in abdomen with distention and vomiting since 5 days. During Systemic evaluation, we found patient was severally dehydrated hence IV LINE Placed and hydrate the patient, simultaneously physically examined and we find signs of -RS - occasional crepts heard, abdomen - tenderness ++, guarding ++ . Radiological investigation also done, X-ray abdomen

showed features of dilated bowel loop with air fluid levels. Ultrasonic - s/o dilated bowel loop with sluggish peristalsis. Blood report revealed Hb- low, WBC - raised, RFT - slightly deranged rest is normal. Patient shifted to exploratory laparotomy for intestinal obstruction and shocked to discover that it was a huge cystic lesion located at the small bowel mesentery. Its size was Approximately 15\*10\*14 cm in between two leaves of mesentery more towards jejunum, we of the opinion that it was a mesenteric cyst, And Cystic lesion was resected along with a part of the bowel where it was inseparable from the cyst. Other findings - were dilated proximal fluid filled small bowel loop. Finally total excision of cyst with end to end anastomosis of jejunum segment done with 3-0 mersilksuture material in 2 layers, mesenteric window closed to prevent internal hernia formation in future. Complete procedure was done under visual control, operative duration was 80 minutes post operative drainage was left for 72 hour along with ryles tube to decompress the proximal bowel and then removed, patient discharged on 8<sup>th</sup> day. The histopathological report confirmed the diagnosis of mesenteric cyst.

## Pathological findings

A well defined cystic lesion attached with bowel was received in surgical pathology section. It was 5 mesenteric cysts densely adhered with each other of size approximately 10 cm, 5cm in diameter with 3 were small cysts, with - milky white fluid in it. **Cut section** shows - multiloculated cysts with cystic wall lined by - endothelial lining, some places scanty lymphoid aggregates noted in the wall.



**Figure 1:** A large mesenteric cyst attached to the mesentery **Figure 2:** A large mesenteric cyst during operation



## DISCUSSION

It has been indicated already many cysts can be enucleated in toto. Mesenteric cyst were first described in 1507 by Italian pathologist Antonio benivieni (Florence 1443 -1502) during the autopsy on an 8 year girl<sup>3</sup>. The first surgical excision was reported in 1880 by Tillaux – according to them preoperative diagnosis and localization remains challenging<sup>12</sup>. One study described Mesenteric cyst found of varying sizes may ranges from a few centimeters to over 10 centimeters<sup>1</sup>. The cysts can remain asymptomatic and grow to giant proportions, they may be mistaken for ascites on physical examination and abdominal imaging studies<sup>8</sup>. The first treatment of choice is excision of the cyst at the same time required bowel resection in so many cases<sup>2</sup>. As in our experience 10% patient who were bearing cyst and underwent surgery if it was very large and extending to retroperitoneum, in such cases during excision leaving the last small portion of cyst , that extends to the retroperitoneum is safest solution and surgical option<sup>3</sup>. We present a case of a giant mesenteric cyst successfully removed surgically, The rarity of such mesenteric cyst make them difficult to diagnose clinically and pathologically.<sup>9</sup> Since the early 90 s the laparoscopic approach gives best outcome of patient who were operated for mesenteric cyst laparoscopically<sup>4</sup>. In this study author concluded that, Great advantage of laparoscopy is the optimal view with a very helpful magnification during dissection of mesenteric cyst<sup>5</sup>. Mesenteric cyst can be easily and safely managed by laparoscopy<sup>6</sup>. In our experience losan off pathological classification, which create the pathologic situation to surgical option regardless of the nature of the cyst, According to author – mesenteric cyst classified pathologically in to 4 types 1) Pedicled cyst- easily removed, 2) sessile in leaves of the mesentery - required bowel resection . 3) Extend to retroperitoneum– often incomplete resection, 4) Multicentric – may required complex surgery – sclerotherapy or both<sup>7</sup>. The older treatment of marsupialisation of a mesenteric cyst has little to recommend it, a fistula or recurrence result<sup>10</sup>.

## CONCLUSION

In our study mesenteric cyst excision done easily, safely and successfully.

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Source of Support: None Declared  
Conflict of Interest: None Declared