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# A Case Report On Mesenteric Cyst – A Rare Abdominal Cavity Benign Tumour

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## ABSTRACT

Mesenteric cyst is a rare benign cystic swelling occurring within the abdominal cavity. These cystic lesions are usually asymptomatic and are an incidental intra abdominal finding, but sometimes patients can present with symptoms. The absence of any specific symptoms accompanied by its rare occurrence poses a challenge for diagnosis. Ultrasonography and contrast enhanced computed tomographies are useful for arriving at the diagnosis. The treatment consists of resection of the cyst completely.

Keywords: Mesenteric cyst, Abdominal, Tumour, Ultrasonography

## INTRODUCTION

Mesenteric cysts are a rare benign entity. It was reported first by Benevieni in the year 1507 as an autopsy finding, and the complete surgical removal was first performed by Tillaux in the year 1880<sup>1,2</sup>. It is diagnosed approximately 1 in every 100,000 population in adults and 1 in every 20,000 population in children and has a 2:1 female to male ratio<sup>3</sup>. They are usually asymptomatic. Symptomatic cases may present with mass in the abdomen (44%-61%), vomiting (45%), vague abdominal pain which can be acute or chronic (55%-81%), abdominal distension (17%-61%), diarrhoea (6%), constipation (27%)<sup>4</sup>. They are more commonly located in ileum (60%), followed by ascending colon (24%) retroperitoneum (14.5%), and the omentum<sup>5</sup>. Mesenteric cysts are mostly asymptomatic, but they may present with symptoms caused due to stretching of the mesentery by rapid expansion, infection compression of adjacent structures or rupture with hemorrhage<sup>6</sup>. Clinical features include vague abdominal pain, abdominal distension, palpable mass and rarely obstructive uropathy and intestinal obstruction. Most cases found incidentally during other surgical procedure<sup>7</sup>. In this

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case report we a case of mesenteric cyst managed in our institution. We also discuss in detail on mesenteric cyst and its treatment.

## CASE REPORT

A male patient aged 58 years came with complaints of left lumbar region swelling for 2 years associated with mild pain. On examination a mass of size 6x5cms was palpable in left lumbar region which was smooth with ill-defined margins. USG abdomen a cystic collection of 10x8.2cm in left lumbar region. Contrast enhanced CT scan was done to obtain further information on the suspicious cystic lesion which revealed mesenteric cyst of 10.5x7x9 cms adjacent to third part of duodenum. Patient was planned for elective mesenteric cyst excision. Intraoperatively a cyst of 10x8x9 cms was found adhered to the mesentery (Figures 1,2), cyst was excised into to (Figure 3) and drain tube was placed. Histopathological examination report revealed a benign cyst lined by cubical epithelium. The wall of the cyst showed nodules of collagen fibres with focal lymphocytic infiltration. Post surgery there was no significant complications and patient was sent home on day 7 after surgery.

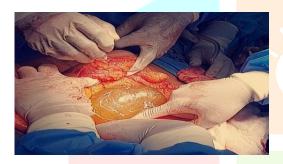


Figure1. Shows mesenteric cyst adhered to the mesentery.



Figure 2: Showing intraoperative dissection of cyst



Figure 3: Showing mesenteric cyst removed in total

#### DISCUSSION

Mesenteric cysts are non malignant lesions which occur rarely. They are commonly diagnosed incidentally and are asymptomatic. The etiology still remains unclear it is believed to occur as a result of mesenteric lymphatics degeneration, or as a anomaly present congenitally, they may also occur from endometriosis, pelvic inflammatory disease, previous pelvic surgery, trauma, or neoplasia<sup>8</sup>. The mesenteric cyst can have a common physical finding called Tillaux's sign in which a mass lesion of the abdomen can be mobilised only in the one direction horizontally and not vertically. Apart from clinical signs, it is mandatory to the diagnosis the mesenteric cyst via imaging modalities. Ultrasonography abdomen is often used in the initial evaluation and may show a well-defined fluid filled cystic lesion near bowel loops. A double fluid level is regarded as a important finding that pinpoints to mesenteric cysts, this is because the fluid in upper level is due to the chyle and a fluid in the lower level is a lymph which is heavier<sup>9,10</sup>. A Computed tomography scan or magnetic resonance imaging is done additionally to evaluate the relationship with the adjacent viscera and vessels. The mesenteric cyst can be removed by enucleation of the mesenteric cyst either by open or laparoscopic method. In case of adhesions of the surrounding structures to the cyst a resection of the cyst along with the structure adherent to it may be necessary<sup>11</sup>. The differential diagnosis of includes hydatid cysts, cystic teratoma, pancreatic pseudocysts, endometriosis, hemangiomas, peritoneal inclusion cysts, cystic mesenteric panniculitis (sclerosing mesenteritis), and urogenital cysts.

### **CONCLUSION**

Mesenteric cysts always present with a challenge in diagnosis and must be included in differential diagnosis whenever we encounter a abdominal mass. Physical examination does not always provide a diagnosis. Imaging can be helpful in identifying the cyst. Mesenteric cysts although benign can produce complication due to pressure to adjacent structures. Mesenteric cysts are treated by surgical resection, through either open or laparoscopy.

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