



## LAPROSCOPIC RESECTION OF GASTRIC DUPLICATION CYST USING LINEAR STAPLER: A RARE CASE REPORT

### General Surgery

**Dr. Ritvik Jaykar** Head of the department of Surgery; V.M.G.M.C Solapur.

**Dr. Ravi Kandalgaonkar** Paediatric surgeon; V.M.G.M.C Solapur.

**Dr. Sachin Jadhav** Assistant Professor V.M.G.M.C Solapur.

**Dr. Aakanksha Ashok Giri** Junior Resident V.M.G.M.C Solapur.

### ABSTRACT

Gastrointestinal tract duplication cysts are rare congenital abnormalities that may occur anywhere along the GIT; from mouth to anus; most commonly found around ileum. In this article we present a rare case of a 5 year old boy with situs inversus totalis with gastric duplication cyst excised using laproscopic linear stapler

### KEYWORDS

Gastric duplication cyst; Laproscopic linear stapler; situs inversus totalis.

### INTRODUCTION

A 5 year old male child with situs inversus totalis condition was referred to our institution for cystic lesion in epigastric region detected by ultrasonography of abdomen. He had complaints of abdominal pain since 1 month; which was dull aching and non radiating in nature; not associated with nausea /vomiting/malaise/fever.

On clinical examination palpable lump was found in epigastric region which was non tender. All blood parameters were normal along with normal amylase and lipase value; sonography abdomen revealed cystic lesion of size 8\*5.2\*10cm; volume about 100cc in epigastric region (figure a)

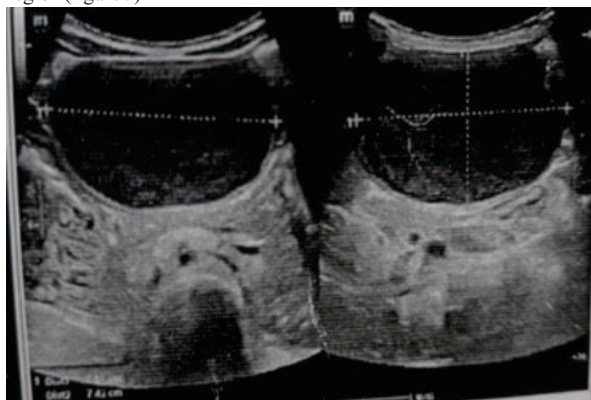


figure a- USG Abdomen.

Chest Roentgenogram was normal (figure b)

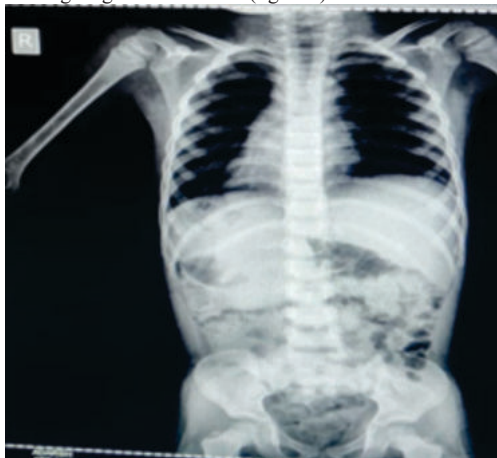


Figure B

Patient underwent a contrast enhanced CT of abdomen and pelvis for suspected cystic lesion which revealed a right upper quadrant cyst of size 8.4\* 5.3cm Displacing stomach posteriorly , wall thickness measures 2.5mm.

Patient's preoperative diagnosis was mesenteric cyst and surgery was planned accordingly which was laproscopic resection of mesenteric cyst.

During the operative course the cyst was found to be located near the greater curvature of the stomach adherent to it; no communication was observed with stomach/ liver/spleen. Cyst decompressed by draining the fluid from the cyst and cyst excised using linear stapler (figure c 1,2)

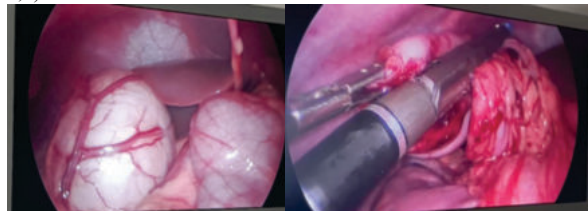


figure c 1 & 2-

The patient had uneventful post operative recovery ,was discharged on post operative day 8 and was asked for OPD basis follow up.

### PATHOLOGICAL FEATURES

Histopathological gross examination revealed cyst wall measuring 6\*5\*2 cm with unremarkable external surface with cut surface showing smooth mucosa with white and pink colour (figure d)

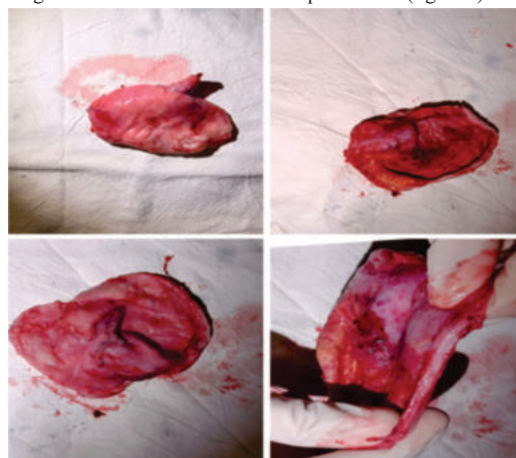
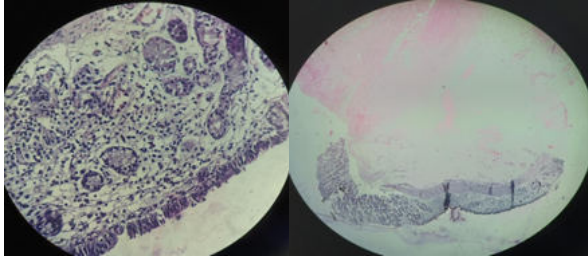


Figure D-

Microscopic examination revealed mucosa, submucosa, and muscularis propria and serosa predominantly of gastric body type with intervening areas of simple columnar epithelium containing apical mucus and cilia as in embryonic intestinal epithelium. (figure 1 and 2)



**Figure 1&2 –**

## DISCUSSION

Gastrointestinal duplication cysts are rare congenital lesions in adults. Some patients are asymptomatic while others can present with abdominal pain, bleeding, and abdominal pain. EUS can offer an accurate diagnosis of duplication cysts. EUS-FNA allows high-resolution morphologic analysis as well as sampling and microscopic examination of cyst contents; it can also lead to duplication cyst infection with associated complications despite pre and postprocedural antibiotics in some patients. EUS-FNA of duplication cysts can carry an increased risk of complications, but may be warranted to obtain a definitive diagnosis and to rule out more serious pathology.

Once the diagnosis of duplication cyst is established, treatment can vary depending on the presence of symptoms. In symptomatic patients, surgical resection is often the choice for symptom relief. In asymptomatic patients, surgical resection is controversial. While some authors advocate for resection due to possible malignant degeneration of the duplication cyst, others have advocated for observation. Since there have been case reports of stable duplication cysts on EUS surveillance, this may be a suitable method of outpatient follow-up and surgical resection can be considered if patient develops symptoms. In any case, surgical versus nonsurgical management of asymptomatic duplication cysts is likely to remain controversial until we understand more about the time course and risk factors associated with their malignant degeneration.

## REFERENCES

1. Sangüesa Nebot C, Llorens Salvador R, Carazo Palacios E, Picó Aliaga S, Ibañez Pradas V. Enteric duplication cysts in children: varied presentations, varied imaging findings. *Insights Imaging*. 2018 Dec;9(6):1097-1106. [PMC free article] [PubMed]
2. Pant N, Grover JK, Madan NK, Chadha R, Agarwal K, Choudhury SR. Completely isolated enteric duplication cyst associated with a classic enterogenous duplication cyst. *J Indian Assoc Pediatr Surg*. 2012 Apr;17(2):68-70. [PMC free article] [PubMed]
3. Tiwari C, Shah H, Waghmare M, Makhija D, Khedkar K. Cysts of Gastrointestinal Origin in Children: Varied Presentation. *Pediatr Gastroenterol Hepatol Nutr*. 2017 Jun;20(2):94-99. [PMC free article] [PubMed]
4. Liu R, Adler DG. Duplication cysts: Diagnosis, management, and the role of endoscopic ultrasound. *Endosc Ultrasound*. 2014 Jul;3(3):152-60. [PMC free article] [PubMed]
5. Guarise A, Faccioli N, Ferrari M, Romano L, Parisi A, Falconi M. Duodenal duplication cyst causing severe pancreatitis: imaging findings and pathological correlation. *World J Gastroenterol*. 2006 Mar 14;12(10):1630-3. [PMC free article] [PubMed]
6. AbouZeid AA, Mohammad SA, Ibrahim SE, Fagelnor A, Zaki A. Late Diagnosis of Complete Colonic and Rectal Duplication in a Girl with an Anorectal Malformation. *European J Pediatr Surg Rep*. 2019 Jan;7(1):e47-e50. [PMC free article] [PubMed]