International Journal of Science and Research (IJSR)
ISSN: 2319-7064
SJIF (2022): 7.942

Enteric Duplication Cyst: A Case Report

Dr. Sweta Patel[1], Dr. Iliyas A. Juneja[2]

[1]Second Year Resident Doctor, Department of General Surgery, Pdu Medical College & Hospital, Rajkot, India
Email: *swetapatel66777[at]gmail.com*

[2]Associate Professor & HOD, Department of General Surgery, Pdu Medical College & Hospital, Rajkot, India
Email: *iliyasjuneja[at]gmail.com*

Abstract: ***Enteric duplication cyst are rare congenital malformations. These are mostly seen in early childhood but rarely detected in adults. Intestinal duplication cysts most commonly occur in the small intestine. There are serious complications such as obstruction, torsion, intussusception, and a tendency for malignant transformation. To prevent these complications, resection should be performed as early as possible, even for small intestine duplication cysts discovered accidentally. In this paper, we report a unique case of a terminal ileum duplication cyst in a 20 - year - old female who presented with a chief complaint of a right sided abdominal pain. Based upon computed tomography, the diagnosis was confirmed. The cyst was resected laparoscopically. Advancement in laparoscopic techniques has made it possible to treat enteric duplication cyst in an earlier phase and with minimal incision.***

Keywords: Enteric Duplication Cyst, torsion, intussusception

1. Introduction

Enteric duplication cysts are an aberrant additional primitive gut segment that are extremely rare (1: 4500births, 0.2% of all children). It can be round, tubular, or cystic; the latter kind is more typical. [1] Anus to oesophagus are among the gastrointestinal tract segments that may be affected by an enteric duplication cyst. [2] The small intestine (terminal ileum, approximately 47%) is the most common site, followed by the colon (20%), oesophagus (17%), stomach (8%), and duodenum (2%). The presence of gastrointestinal mucosal lining, followed by submucosa and muscularis propria, is indicative of an enteric duplication cyst. [3]

When an enteric duplication cyst is identified, even in people who are asymptomatic, surgical removal is necessary because the cyst may cause symptoms such as an acute abdomen, intestinal blockage, bleeding in the rectum, or malignant alterations. In certain circumstances, the cyst may even cause symptoms. [1]

2. Case Details

A 20 - year - old female patient presented with colicky abdominal pain and on - and - off vomiting for 1 month. There was no any significant medical or family history. On physical examination there was no any tenderness or palpable mass over abdomen. Abdominal ultrasound showed 65×42mm size of well - defined cystic lesion in right iliac fossa with fat fluid level within showing a gut signature. CECT abdomen and pelvis revealed 57×28mm size of well - defined thick cystic lesion in terminal ileal loop.

Patient was planned for laparoscopic resection of cyst. Intra - operatively, the mass was mobile, thick walled cystic in appearance, which is isolated from surrounding tissues. The appendix was noted separately from the cyst. Then the cyst was removed as a whole through an incision made over right lumber region. Excised part contains terminal ileum, appendix and cecum containing cyst. Following resection of bowel containing the cyst ileo - ascending anastomosis was done. Post operatively patient's recovery was satisfactory.

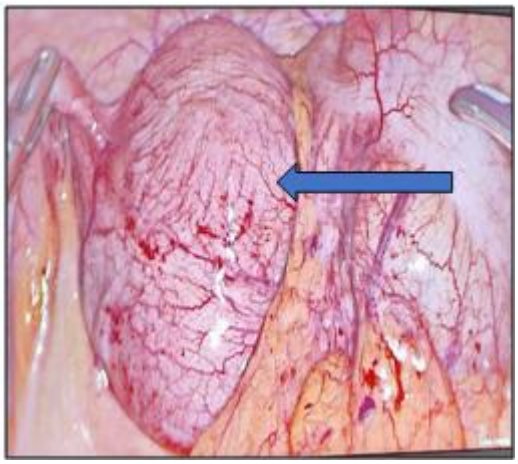

Figure 1: Intra - operative image showing enteric duplication cyst (blue arrow)

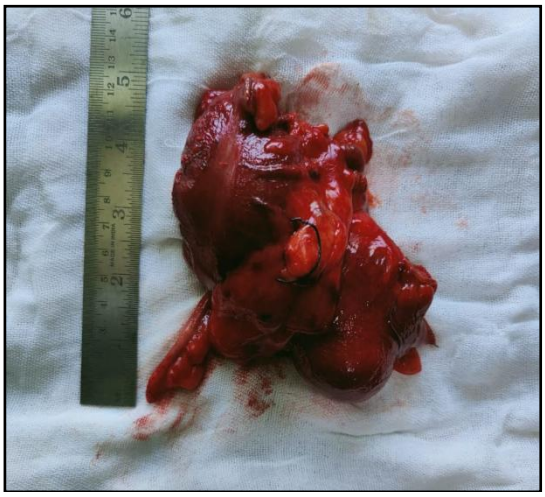

Figure 2: Excised specimen of enteric duplication cyst

3. Discussion

A hollow, spherical, cystic, epithelial - lined structure, an enteric duplication cyst is supplied by common mesenteric blood veins and is linked to the wall of the gastrointestinal

system [4]. Although the origins of enteric duplication cysts are unknown, it has been suggested that they may have originated from either a prolonged fetal enteric diverticula or an intestine recanalization failure brought on by intrauterine vascular occlusion [2]. Enteric duplication cyst also associated with malformations most frequently oesophageal duplication, followed by vertebral abnormalities. No malformation or malrotations was seen in our patient [5].

Through imaging modalities including ultrasonography, CT scan, or MRI, enteric duplication cysts are identified as smooth fluid - filled cystic lesions in or adjustments to the wall of a portion of the alimentary tract [3]. In all symptomatic cases, when difficulties develop, or even in asymptomatic ones, surgical removal of the cyst is advised to avoid consequences including intestinal obstruction, volvulus, intussusception, hemorrhages, or malignant transformation [5]. In our case the patient had symptomatic cyst and underwent for laparoscopic surgical excision and postoperative histopathology report gives confirmation of cyst wall showing intestinal tissue.

4. Conclusion

Enteric duplication cysts are rare congenital lesion in adults. To prevent complications, the cyst must be removed and treated early. When diagnosing duplication cysts in intra - abdominal cystic masses that are asymptomatic, laparoscopic excision ought to be the initial surgical option.

References

[1] Erman M, Celik A. Laparoscopic excision of a very rare isolated gastric enteric duplication cyst: case report and literature review. Ann Pediatr Surg.2022; 18 (1): 4–9.
[2] Khalid Al - Sindi (2021) Enteric Duplication Cyst; a Unique Clinical Presentation in an Adult Female. JOCR 1 (1): 1 - 4.
[3] Elhasan MEAB, Sirdab YA, Bakheit IA.54 - cm enteric duplication cyst in a 13 - year - old female. Clin Case Rep.2018; 6: 2099– 2102.
[4] Gümüş M, Kapan M, Gümüş H, Onder A, Girgin S. Unusual noncommunicating isolated enteric duplication cyst in adults. Gastroenterol Res Pract.2011; 2011: 323919. doi: 10.1155/2011/323919. Epub 2011 May 5.
[5] D'Agostino V, Castaldo A, Catelli A, Pesce I, Genovese S, Coppola L, Monaci A, Esposito C, Amitrano M. An ileal duplication cyst case report: From diagnosis to treatment. Radiol Case Rep.2021 Apr 28; 16 (7): 1597 - 1602.