Case Report

Cystic Duplication Cyst of Ascending Colon in an Adult

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Gastrointestinal duplication cysts are rare congenital abnormalities that are usually seen in childhood. Colonic duplication cyst is very rare in adults and is usually asymptomatic. We report a 42-year-old female with a duplication cyst in the proximal ascending colon who presented with recurrent episodes of colicky abdominal pain. The cyst could be well visualized on colonoscopy and the patient underwent successful right hemicolectomy with ileotransverse anastomosis.

KEYWORDS: Computed tomography, colonoscopy, duplication cyst

Introduction

Gastrointestinal duplications are rare congenital anomalies with ileum being the most common site. [1,2] Duplication cysts in colon are very rare and seen usually in childhood. We report a 42-year-old female with a duplication cyst in the proximal ascending colon that was diagnosed on contrast-enhanced computed tomography (CECT) as well as colonoscopy.

CASE REPORT

A 42-year-old female presented with recurrent episodes of colicky abdominal pain for the past 1 month. The clinical examination, laboratory results, and ultrasound of the abdomen were unremarkable. CECT of abdomen revealed a well-defined lobulated nonenhancing hypodense lesion in the proximal ascending colon measuring 5 cm \times 3.7 cm \times 2.1 cm [Figure 1]. Colonoscopy revealed a submucosal lesion in the ascending colon [Figure 2] that was soft on touch with biopsy forceps. This lesion was aspirated under endoscopic guidance using a 22 G needle, and 20 ml of straw-colored fluid was aspirated. The lesion collapsed following aspiration [Figure 3] and the cytological as well as biochemical analysis of the aspirated fluid was inconclusive. The aspirated fluid had protein of 4.4 g/dl, cholesterol of 37 mg/dl, bilirubin of 0.55 mg/dl, amylase of 13 U/L, lipase of 25 U/L, and carcinoembryonic antigen of 1.08 mg/ml, and cytological examination was inconclusive.

The patient was taken up for surgery and intraoperatively the right-sided colon was found to be normal on

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inspection [Figure 4]. However, on palpation, a soft intraluminal mass could be felt in the ascending colon. The patient underwent right hemicolectomy with ileotransverse anastomosis. The cut section of the resected specimen revealed presence of cystic lesion in ascending colon [Figure 5]. The histopathological examination of the resected specimen revealed a cyst that was not in continuity with the intestinal lumen and was lined by intestinal epithelium with cyst wall comprising lamina and muscularis propria, features suggestive of duplication cyst. The patient had an

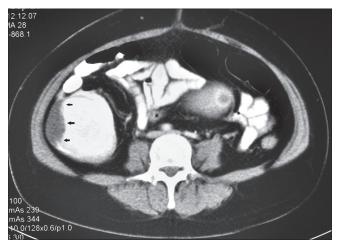


Figure 1: Contrast-enhanced computed tomography abdomen: Well-defined lobulated nonenhancing hypodense lesion in the proximal ascending colon (arrows)

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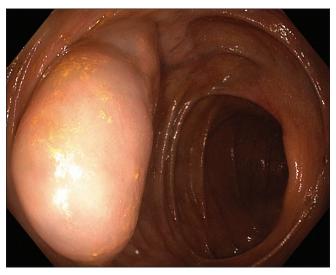


Figure 2: Submucosal lesion in the ascending colon

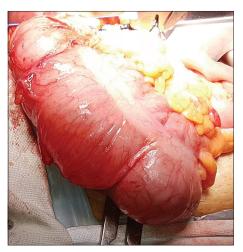


Figure 4: Intraoperative image: Normal right-sided colon on inspection

uneventful postoperative period and is asymptomatic after 1 month of follow-up.

DISCUSSION

Gastrointestinal duplication cysts are rare congenital abnormalities that are usually seen in childhood with most of them manifesting before the age of 2 years. [1,2] Ileum is the most common site for duplication with colonic duplications seen in 10%–15% of cases. Colonic duplication is very rare in adults and are usually asymptomatic. [3] They can also be symptomatic with common symptoms being abdominal pain and intestinal obstruction and rarely they may present with perforation. They are cystic in majority of patients whereas tubular duplications are less common. [1,2] They can be detected on endoscopic ultrasound, CT, or contrast enema with colonoscopy correctly identifying communicating duplication cysts. [3] However, correct preoperative diagnosis is uncommon with most reported



Figure 3: Submucosal lesion collapsed following endoscopic aspiration



Figure 5: Cut section of resected colon: Cystic lesion in ascending colon

cases being diagnosed postoperatively.^[1-3] Surgical resection is the recommended treatment for symptomatic patients with some authors recommending removal even in asymptomatic patients because of potential of development of malignancy.^[1-3]

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Conflicts of interest

There are no conflicts of interest.

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