

A Rare Case of Lesser Sac Abscess Secondary to Transverse Colon Diverticular Abscess

Dr. Ankita Goyal

Department of Radiodiagnosis, Kasturba Medical college, Mangalore, Manipal Academy of Higher Education, Manipal, India.

Dr. Santosh Rai

Department of Radiodiagnosis, Kasturba Medical college, Mangalore, Manipal Academy of Higher Education, Manipal, India.

Dr. Manohar Pai

Department of Surgery, Kasturba Medical college, Mangalore, Manipal Academy of Higher Education, Manipal, India.

Abstract:

Background: Fluid within the lesser sac should direct a search for pathology in neighboring organs or for peritoneal malignancy. This case reports a 63-year male presenting with complaints of abdominal pain with nausea and vomiting especially after taking meals and early satiety for 6 days with a mass palpable per abdomen in left hypochondrium. His blood WBC counts were moderately elevated, and amylase was borderline. He was worked up with UGIscopy, CECT and Colonoscopy.

Key Words: Lesser sac abscess, transverse colon perforation, transverse colon diverticulitis, Pancreas pseudocyst mimic

Date of Submission: 04-10-2021

Date of Acceptance: 18-10-2021

I. Introduction

There is extension to the left of the greater omentum coupled with rightward gastric rotation during embryogenesis of the GIT. This results in the formation lesser sac which lies between the pancreas and the stomach. The lesser sac is a potential space. Through the foramen of Winslow, it communicates with the greater sac ⁽¹⁾

Imaging of lesser sac has improved substantially with the development of computed tomography. ⁽²⁾

Perforation of the gastrointestinal tract is a condition which requires emergency surgery. It can be due to numerous causes. The diagnosis is usually made on imaging. MDCT has been found to be very accurate in diagnosing such perforations and their site. ^(3,4)

II. Case Report

A 63 year male presented with complaints of abdominal pain with nausea and vomiting especially after taking meals and early satiety since 6 days. Clinically a mass was palpable per abdomen in left hypochondrium. His blood WBC counts were moderately elevated, and amylase was borderline. Clinically, diagnosis of gastric outlet obstruction was made. Upper Gastrointestinal Endoscopy was done which showed extrinsic gastric compression. A contrast-enhanced computed tomography (CECT) was performed.

Axial CECT demonstrated a lesser sac fluid collection of size 10 x8 x7 cm with thick enhancing wall, multiple tiny air pockets, air fluid levels. The collection was seen abutting the stomach. The fluid collection was seen extending up to the splenic flexure of the transverse colon with minimal bowel wall thickening. The CT was reported as infected Pancreatic pseudocyst and CT guided catheter insertion and drainage was recommended. However, the absence of any Pancreatic changes and borderline Pancreatic Amylase – Lipase was concerning.

A repeat CT with rectal contrast revealed contrast accumulation in the lesser sac collection suggesting leak from transverse colon communicating with lesser sac fluid collection.

Simple aspiration and drainage of the collection was performed. Pus was sent for Culture which grow E Coli. Colonoscopy revealed transverse colon diverticulitis with perforation.

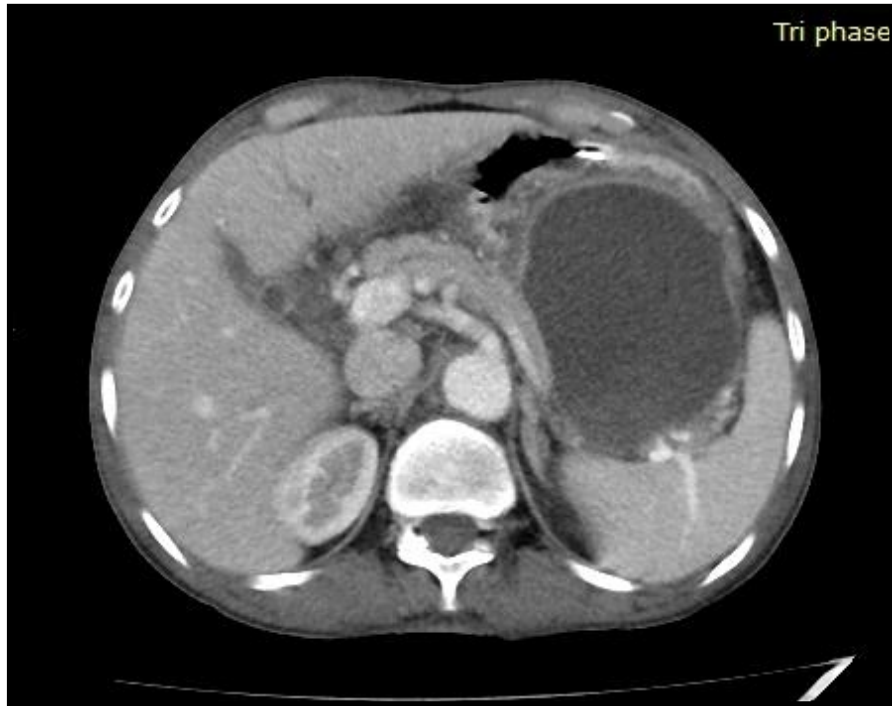


FIG A: CECT showing a lesser sac fluid collection of with thick enhancing wall, multiple tiny air pockets and air fluid levels.



FIG B : CECT showing free intraperitoneal air



FIG C: Repeat CT with rectal contrast showing contrast accumulation in the lesser sac collection



FIG D: CT guided aspiration and drainage of the collection.

III. Conclusion

Fluid within the lesser sac should direct a search for pathology in neighboring organs or for peritoneal malignancy. The most common type of fluid in the lesser sac is ascitic transudate in patients with hepatic failure or renal failure. Inflammatory infiltrates in the lesser sac are commonly secondary to acute pancreatitis. Duodenal ulcer perforation with lesser sac fluid collection and pneumoperitoneum are less common.

Conditions involving the lesser sac may have nonspecific and overlapping features, making clinical and imaging correlation essential. Familiarity with the lesser sac anatomy, disease spectrum and characteristics CT appearances allows the radiologist to make the correct diagnosis for proper management.

References

- [1]. Gore RM, Callen PW, Filly RA. Lesser sac fluid in predicting the etiology of ascites: CT findings. *American Journal of Roentgenology*. 1982 Jul 1;139(1):71-4.
- [2]. Dodds WJ, Foley WD, Lawson TL, Stewart ET, Taylor A. Anatomy and imaging of the lesser peritoneal sac. *American journal of roentgenology*. 1985 Mar 1;144(3):567-75.
- [3]. Imuta M, Awai K, Nakayama Y, Murata Y, Asao C, Matsukawa T, Yamashita Y. Multidetector CT findings suggesting a perforation site in the gastrointestinal tract: analysis in surgically confirmed 155 patients. *Radiation medicine*. 2007 Apr;25(3):113-8.
- [4]. Hainaux B, Agneessens E, Bertinotti R, De Maertelaer V, Rubesova E, Capelluto E, Moschopoulos C. Accuracy of MDCT in predicting site of gastrointestinal tract perforation. *American Journal of Roentgenology*. 2006 Nov;187(5):1179-83.

Dr. Ankita Goyal, et. al. "A Rare Case of Lesser Sac Abscess Secondary to Transverse Colon Diverticular Abscess." *IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)*, 20(10), 2021, pp. 51-54.