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Make Your Diagnosis

Elderly Man With Left-Sided Abdominal Pain

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Case Presentation

A 65-year-old male presented to the emergency department with abdominal pain. Upon arrival, his vital signs were within a normal range. He complained of epigastric pain for one day with nausea and vomit. Physical examination revealed mild epigastric pain on palpation and left lower quadrant tenderness with obvious muscle guarding. Laboratory testing revealed elevation of white-blood-cell count (17,800 per microliter) while liver function and renal function tests were within normal limits. Under the impression of acute abdomen, emergent computed tomographic was performed (Fig. 1 and Video 1).

What is the most likely diagnosis?

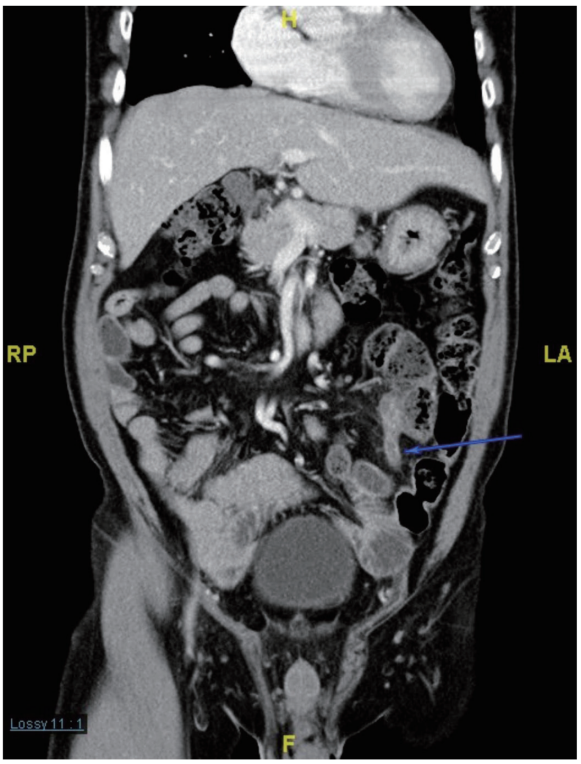

Fig. 1. Coronal view of abdominal and pelvic computed tomography scan.

Discussion

The answer is incomplete colon rotation with left-sided acute appendicitis (LSAA).

The coronal view of a computed tomography scan of the abdomen showed a dilated blind-ended tube structure that is surrounded by fat stranding (Fig. 1, blue arrow). The series of computed tomography scan showed an incomplete rotation of the ascending colon, leaving the cecum and appendix in the left lower abdomen; meanwhile, the appendix is dilated and surrounded by fat stranding (Video 1, blue arrow); the ascending colon is crossing the midline of abdomen (Video 1, red arrow), while the descending colon is located laterally to the cecum (Video 1, yellow arrow). The image is compatible with an incomplete colon rotation with LSAA.

A surgical consultation was obtained. The patient received laparoscopic surgery (Fig. 2), an inflamed and swollen appendix was found beside the descending colon. Laparoscopic appendectomy was performed and the postoperative course was uncomplicated.

LSAA is rare. According to literatures, LSAA mostly happened among patients with situs inversus

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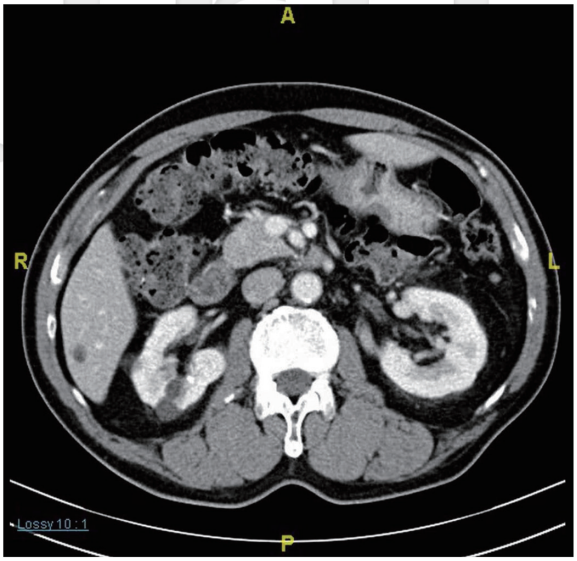

Video 1. Transverse views of abdominal and pelvic computed tomography scan.
Please see Video 1 at: http://doi.org/10.6705/j.jacme.202012_10(4).0007

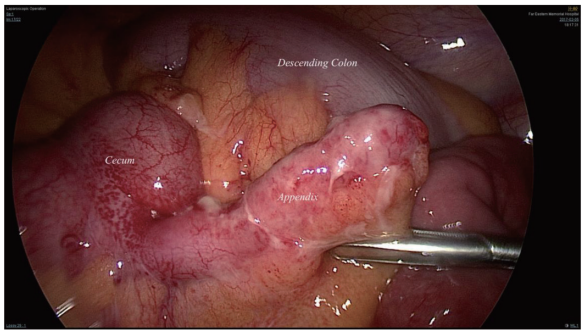

Fig. 2. Intraoperative laparoscopic view.

totalis (SIT) and midgut malrotation.[1] Among the 95 cases reported, 69.4% had SIT while 24.2% had midgut malrotation. Collins reported that the total incidence of LSAA is 0.04%, with 0.024% having abdominal viscera situs inversus and 0.016% having SIT.[2] According to previous reports, LSAA occurs between the age of 8 and 63 years and is 1.5-fold more frequent in men than in women.[3]

The differential diagnosis of left lower quadrant abdominal pain in man includes diverticulitis, renal colic, epididymitis, incarcerated or strangulated hernia, bowel obstruction or perforation, regional enteritis, psoas abscess, and right-sided acute appendicitis and LSAA. A detailed history, associated symptoms, and pain characteristics may give us more hints toward the most reasonable diagnosis. Timely imaging studies, such as X-ray, ultrasound, or computed tomography may disclose further information in making the definite diagnosis.

Although rare, LSAA is a diagnosis that we should keep in mind.

Authors' Contributions

Shyh-Shyong Sim drafted the article. Shyh-Shyong Sim and Shu-Yi Huang contributed to the article review and revision. Jen-Tang Sun supervised and provided quality control. Shyh-Shyong Sim takes responsibility for the paper as a whole.

Conflicts of Interest Statement

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References

1. Akbulut S, Ulku A, Senol A, Tas M, Yagmur Y. Left-sided appendicitis: review of 95 published cases and a case report. *World J Gastroenterol* 2010;16:5598-5602. doi:10.3748/wjg.v16.i44.5598
2. Collins DC. 71,000 human appendix specimens: a final report summarizing forty years' study. *Am J Proctol* 1963;14:265-281.
3. Franklin ME Jr, Almeida JA, Pérez ER, Michaelson RLP, Majarrez A. Cholecystectomy and appendectomy by laparoscopy in a patient with situs inversus totalis. A case report and review of the literature. *Asoc Mex Cir Endoscopica* 2001;2:150-153.