

Recurrent Pancreatitis Due to an Intraluminal Duodenal Diverticulum

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Figure 1: Contrast-enhanced CT revealed saburra that accumulated in the abnormal cavity (white arrow).

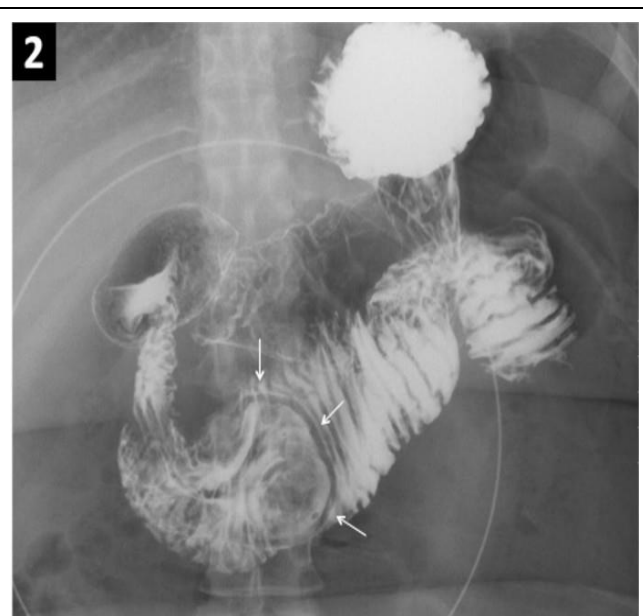


Figure 2: Upper gastrointestinal endoscopy revealed a diverticulum containing food in the descending duodenum.

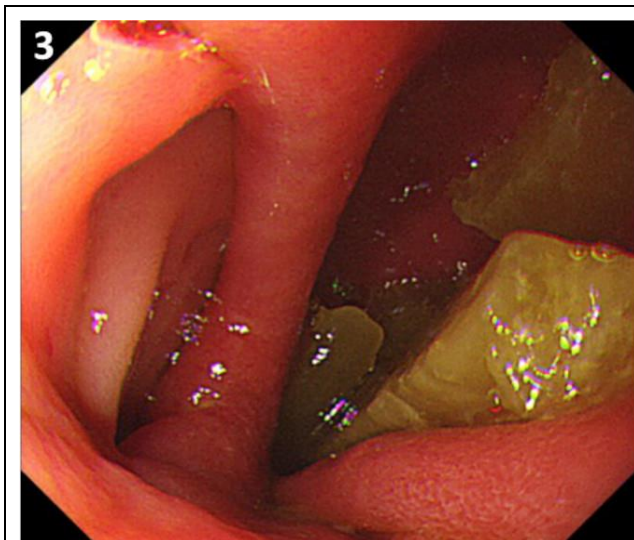


Figure 3: Upper gastrointestinal contrast study revealed 'windsock sign' that an intraluminal diverticulum is visualised by retention of the contrast agent.

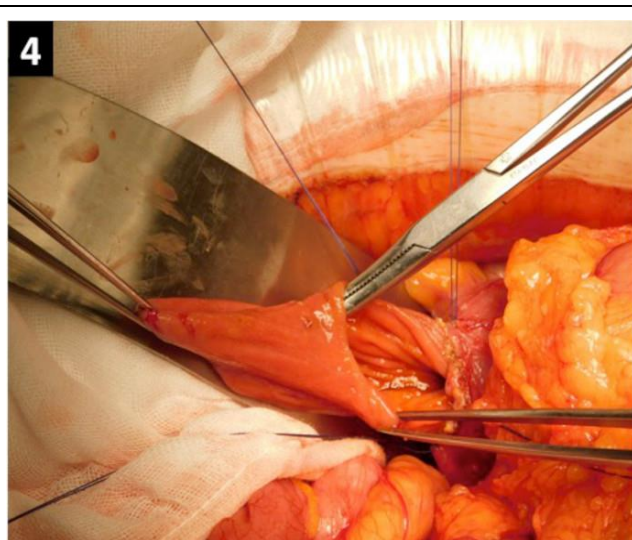


Figure 4: The diverticulum is 3 cm in diameter and covered with duodenal mucosa on both the inside and outside.

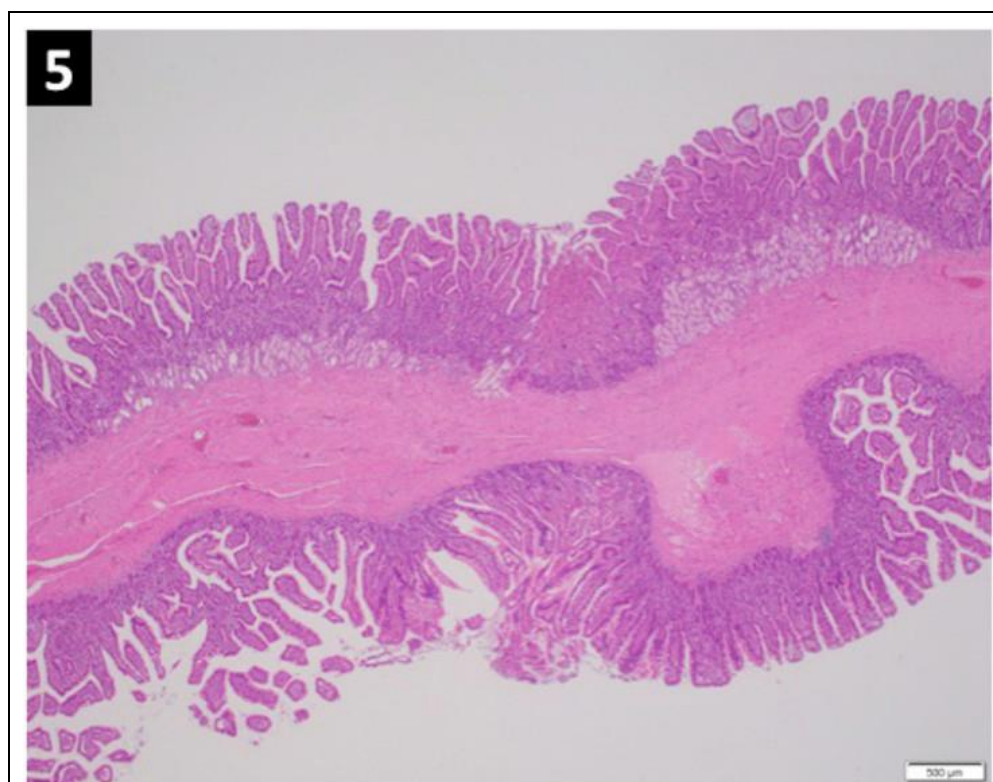


Figure 5: In pathological findings (Azan Mallory stain, $\times 40$), the duodenal mucosa was seen covering both sides of the muscularis mucosae and connective tissue; however, no muscularis propria is seen between the two mucosa layers.

Clinical Image

A 35-year-old woman, with a history of multiple admissions for acute pancreatitis since the age of 17 years, visited our hospital with a chief complaint of epigastric pain. She was diagnosed with intussusception of the upper small intestine based on abdominal contrast-enhanced computed tomography findings (Figure 1). Laboratory data were as follows: white blood cell count, 13930/ μ L; amylase level, 587 U/ L; and C-reactive protein level, 0.24 mg/dL. She was hospitalised for further examination and treatment. Upper gastrointestinal (UGI) endoscopy showed a diverticulum that contained food in the descending duodenum (Figure 2). A UGI contrast study revealed a barium-filled sac within the duodenum (Figure 3); therefore, a diagnosis of an intraluminal duodenal diverticulum (IDD) was made. Mechanical stimulation due to distension caused by food was thought to have caused both the intussusception and the patient's previous episode of pancreatitis. The diverticulum, which emerged from the duodenal lumen below the papilla of Vater, was surgically removed to prevent relapse of the conditions (Figure 4). The resected diverticulum was covered with a mucous membrane, and the inherent muscular layer was lost in the diverticulum (Figure 5). The patient had no symptoms postoperatively.

IDD is a rare congenital anomaly [1]. Its nonspecific symptoms make diagnosis difficult and necessitate appropriate imaging [2]. The 'windsock sign' is typical in a UGI contrast study of a patient with IDD [2,3]. IDD should be suspected when patients present with recurrent epigastric pain and pancreatitis of unknown aetiology.

REFERENCES

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