

# Spontaneous Gastro-pancreatic Fistula: A Rare Complication of Acute Pancreatitis



MedStar Health

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## Introduction

Although Gastrointestinal fistula is a well-recognized complication of acute pancreatitis, it has been rarely reported. Here we present a rare case of spontaneous gastro pancreatic fistula following acute pancreatitis.

## Case Description

A 42 y/o female with PMH of SLE with a recent prolonged hospitalization for acute drug-induced pancreatitis with pseudocyst presented to ED with fever, abdominal pain, nausea, and vomiting.

### On presentation

**Vitals:** Febrile, tachycardic but otherwise hemodynamically stable

**Physical examination:** Tenderness +nt Epigastrium, RUQ and RLQ

### **Laboratory diagnostics:**

-Leukocytosis -COVID-19 positive

### **Imaging:**

-CT Scan A/P: multiple infected peripancreatic collections with communication of LUQ collection with gastric lumen.

### **Hospital course:**

- The patient kept NPO and started on fluids and antibiotics.
- IR evaluated and put 2 pigtail catheters for drainage of peripancreatic collections.
- The tip of the pigtail catheter in the left peripancreatic/retroperitoneal collection was in the gastric lumen.
- Surgery team recommended for continuing conservative treatment with parenteral nutrition, and IV antibiotics as the patient was nontoxic with no signs of free perforation, and pancreatitis would more likely erode a staple or suture line and would put the patient at further risk of free perforation if repair attempted.

- Antibiotics were upgraded as per culture and sensitivity results of drain fluid.
- Repeated multiple bedside leak tests and CT scans with oral contrast continued to be positive for patent gastro-pancreatic fistula.
- The pigtail catheter continues to drain significant necrotic collection.
- The patient continues to be hospitalized and is being managed conservatively with Parenteral nutrition, and IV antibiotics.
- IR was successful in pulling drain out of the gastric lumen in second attempt to allow gastric perforation to heal.

## Images

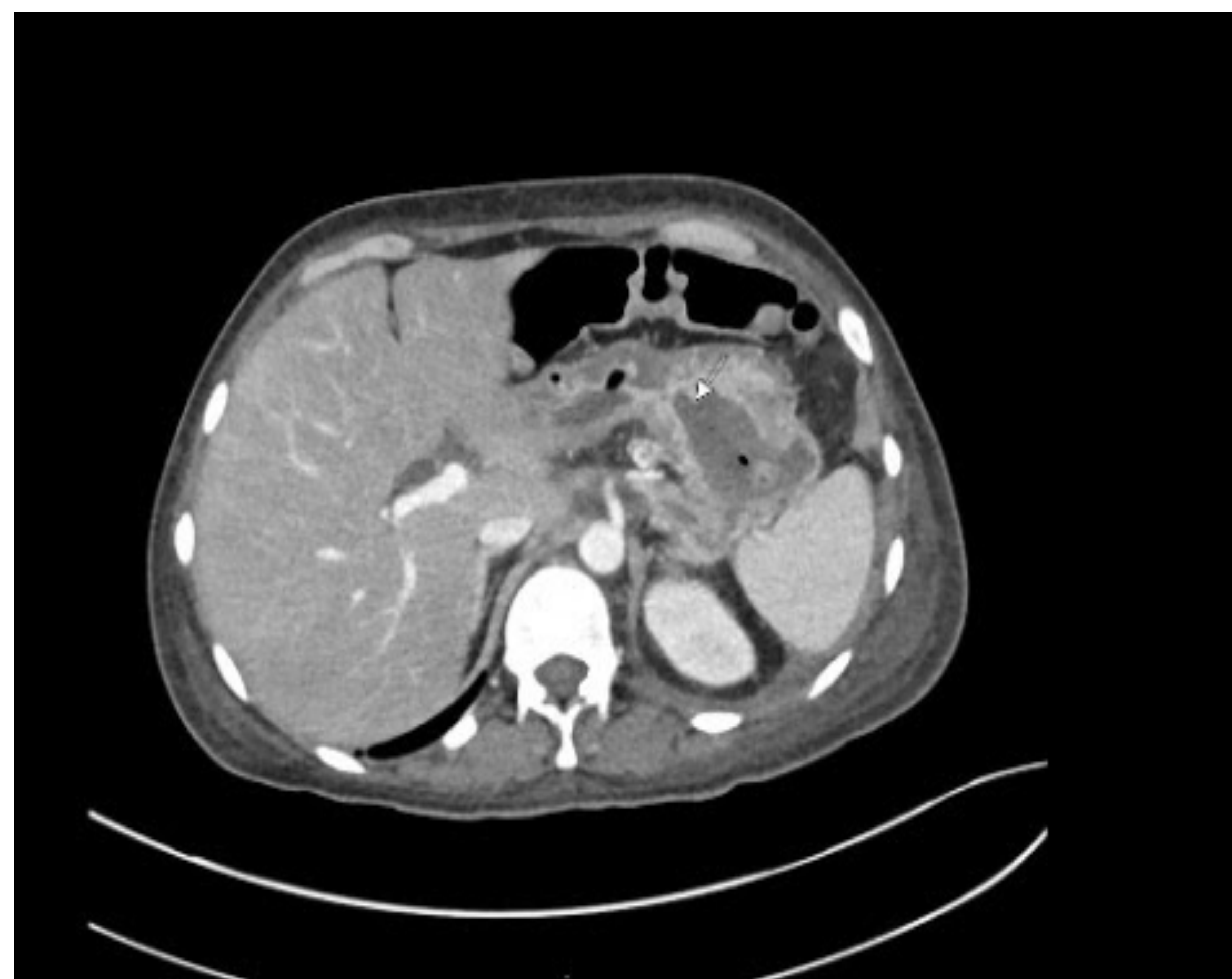


Fig 1: CT abdomen with Iv contrast- Peripherally enhancing fluid collection in the left upper quadrant/gastric wall. There is a communication between this collection with the gastric lumen.

## Discussion

- Fistula of the GI tract following acute pancreatitis can be caused by multiple reasons.
- Necrosis of the bowel may occur concomitantly with the pancreatic or peripancreatic tissue.
- Enzyme-rich fluid and necrosis can lead to vascular thrombosis, which compromises the blood supply of the segmental GI tract, eventually leading to bowel necrosis.
- GI fistulas are more common in patients with necrotizing pancreatitis with infected pancreatic necrosis.

## Conclusion

Despite pharmacologic suppression of pancreatic exocrine secretion and advances in endoscopic and percutaneous therapeutic techniques, pancreatic fistula continues to be a source of morbidity and mortality following pancreatitis and requires multidisciplinary treatment.

## References

- Adsay, N. V. (2003). The “new kid on the block:” Intraductal papillary mucinous neoplasms of the pancreas: Current concepts and controversies. *Surgery*, 133(5), 459-463.
- Buter A, Imrie CW, Carter CR, et al. Dynamic nature of early organ dysfunction determines outcome in acute pancreatitis. *Br J Surg* 2002;89:298–302.
- Hua Z, Su Y, Huang X, et al. Analysis of risk factors related to gastrointestinal fistula in patients with severe acute pancreatitis: A retrospective study of 344 cases in a single Chinese center. *BMC Gastroenterol* 2017;17:29.
- ang JW, Kim MH, Oh D, et al. Factors and outcomes associated with pancreatic duct disruption in patients with acute necrotizing pancreatitis. *Pancreatology* 2016;16:958–65.