Unusual Picture of Pancreatic Abscess in a Patient With a Near-Total Distal Pancreatectomy

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Background

- Pancreatic abscess is an infection of the pancreatic pseudocyst which usually occurs 4 weeks after the onset of acute pancreatitis, meanwhile other causes include but are not limited to chronic pancreatitis, iatrogenic intra-abdominal procedures, and seeding from distant sites. We hereby report a case of an unusual occurrence of pancreatic abscess in a patient with a near-total distal pancreatectomy.

Case Description/Methods

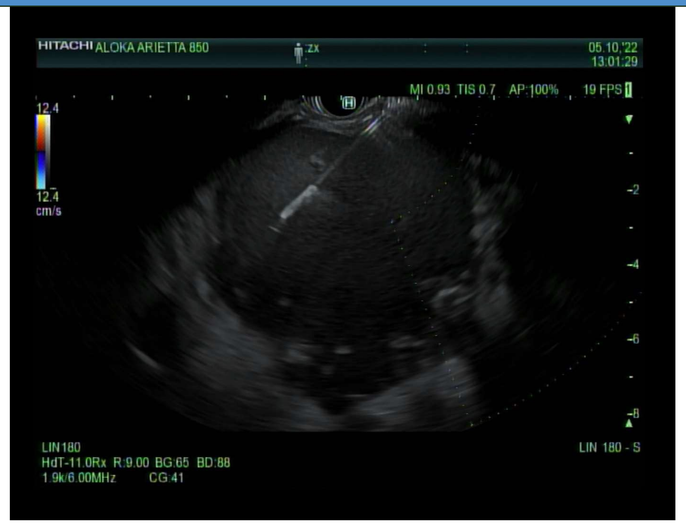
- 56-year old male with past medical history of diabetes, hyperlipidemia, pancreatic adenocarcinoma on chemotherapy, status post near-total distal pancreatectomy 6 months earlier, pancreatic pseudocyst (discovered 3 months earlier) and splenectomy presented with persistent progressive worsening left upper abdominal non-radiating pain, associated with nausea, eight episodes of bilious vomiting, abdominal distension and chills. Patient denied fever and any bowel movement changes. Vitals and labs were insignificant. CT scan of abdomen showed significant increase in the size of the pancreatic cyst by the head of the pancreas with gastric outlet obstruction.
- Patient was started on Unasyn and GI was consulted and evaluated the patient who was taken to EGD/EUS and cystogastrostomy on the same day. A stent was placed [with drainage into the stomach], the cyst was aspirated, the purulent fluid was collected and sent for culture which came back positive for klebsiella pneumonia (resistant to ampicillin and sensitive to different antibiotics).
- Patient reported relief after the procedure and was discharged on ciprofloxacin for 2 weeks. After 2 weeks, follow-up EGD was done for necrosectomy with removal of the stent, and the patient reported great relief of symptoms

References/Acknowledgements

Giovannini M. Endoscopic Ultrasound-Guided Drainage of Pancreatic Fluid Collections. *Gastrointest Endosc Clin N Am*. 2018;28(2):157-169. doi:10.1016/j.giec.2017.11.004

The authors would like to thank the patient for allowing us to share this case with our colleagues.

Results



FNA of pancreatic abscess was negative for malignant cells, with abundant cellular debris, scattered macrophages and very few inflammatory cells.

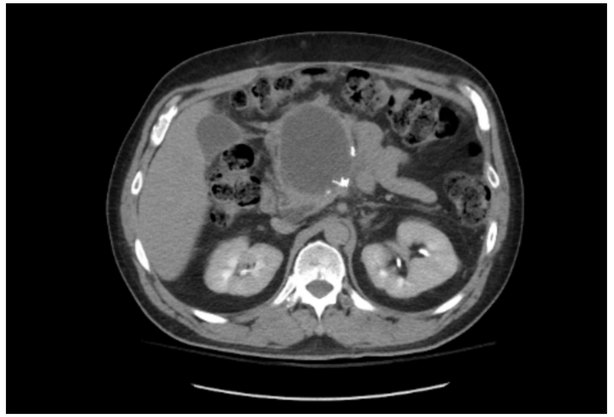


Fig 1. CT Abdomen and pelvis showing significant increase in the size of the pancreatic cyst.

Results (continued)

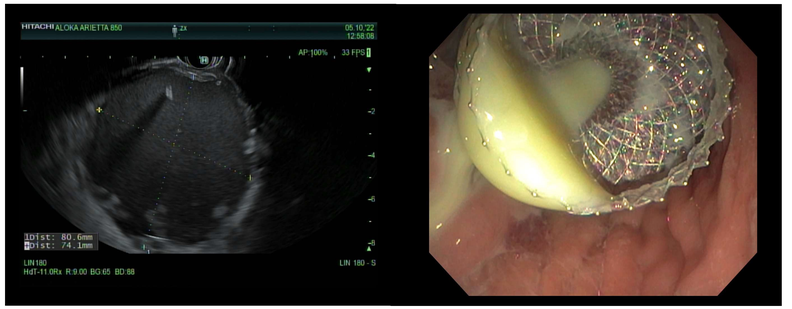


Figure 2. EGD/ EUS showing pancreatic abscess and cystogastrostomy using the AXIOS stent system

Discussion

- Pancreatic abscess is most commonly caused iatrogenically during management of necrotizing pancreatitis, however it can happen in absence of pancreatitis, secondary to biliary tract disease or duodenal disease.
- A high index of suspicion should be maintained in patients with acute pancreatitis, who don't improve after initial management with high RANSON score 3-7 has 24% more chance, and chronic pancreatitis with persistent abdominal pain which can lead to systemic inflammatory response syndrome and death.
- CT is the gold standard in diagnosis with a sensitivity of 74% compared to 35% from ultrasonography, however a following fine needle aspiration, has a sensitivity of almost 100%, and is crucial to distinguish sterile inflammation from infection. Gram negative bacteria is most commonly found in aspirated fluids, however gram positive and rare tuberculosis infection can be seen.
- Invasive surgical cystogastrostomy or cystoduodenostomy, depending on the location of the abscess, should not be delayed in symptomatic patients with infected pancreatic pseudocyst and have better outcomes than solo antibiotic therapy or endoscopic intervention.