A 46-year-old man presented with 3 months of progressive diffuse abdominal pain, 40-pound weight loss, and fever. On evaluation he was afebrile, with cachexia and abdominal distention with diffuse tenderness. White cell count was 10.7 K/UL. Hepatic transaminases and lipase were normal, alkaline phosphatase was 121 U/L, and albumin was 1.6 g/dL. Contrast-enhanced computed tomography demonstrated a large fluid collection (23 cm transverse × 14 cm anterior-posterior × 30 cm craniocaudal) filling the peritoneal cavity and containing air, fluid, and debris with peritoneal enhancement (Figures A and B). Ultrasound-guided aspiration was performed. Culture grew vancomycin-resistant Enterococcus faecium, Enterobacter cloacae, Klebsiella pneumoniae, and mixed aerobic flora. A repeat culture also grew Candida albicans. Echinococcus, amebiasis, and human immunodeficiency virus serologies were negative. Amylase of fluid was greater than 24,000 U/L, suggesting the collection formed as a pancreatic pseudocyst. The patient was treated with fluconazole, linezolid, and ertapenem. After clinical failure of percutaneous drainage, he underwent exploratory laparotomy with resection of the suppurative pancreatic pseudocyst and right hemicolectomy. The large thick-walled pseudocyst contained more than 4 L of feculent fluid. There was evidence of ileal perforation resulting in cyst-enteric fistula. Pathology report revealed no malignancy. He was discharged home on hospital day 40 on fluconazole, linezolid, and ertapenem. After clinical failure of percutaneous drainage, he underwent exploratory laparotomy with resection of the suppurative pancreatic pseudocyst and right hemicolectomy. The large thick-walled pseudocyst contained more than 4 L of feculent fluid. There was evidence of ileal perforation resulting in cyst-enteric fistula. Pathology report revealed no malignancy. He was discharged home on hospital day 40 on fluconazole, linezolid, and ertapenem.

Pancreatic and peripancreatic fluid collections (APFCs) represent a complex clinical dilemma. Collections may be sterile or infected. APFCs can occur in up to 30%–50% of patients with acute pancreatitis, usually within 48 hours. More than 50% of APFCs resolve spontaneously within several weeks, whereas 30%–50% persist and form pseudocysts, similar to the clinical course in our patient. Many pseudocysts will resolve without intervention; however, expected course depends on many anatomic factors including cyst size. Reviews suggest that 73% of cysts that are more than 10 cm will require surgical drainage. Endoscopic therapies have replaced many indications for surgical intervention; however, surgery may still be required with pseudocysts refractory to endoscopic therapy.

Because many pancreatic pseudocysts will self-resolve, image-guided aspiration on a routine basis is not recommended and may lead to secondary infection. Diagnosis of an infected pseudocyst may be challenging, and history, examination, presence of fever, and white blood cell count should be considered. Although imaging can define persistent peripancreatic fluid collections, aspiration of cyst contents is required for diagnosis of suppurative pseudocyst. The most common bacteria cultured include enteric microorganisms, including Escherichia coli, Bacteroides species, Enterobacter species, Klebsiella species, and Streptococcus faecalis. Antimicrobial treatment should be directed toward normal enteric flora until definitive microbiological data are available. There is no consensus regarding appropriate length of therapy; thus, treatment must be determined on an individual basis.

References

Conflicts of Interest
The authors disclose no conflicts.

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