

Primary GI malignancy masquerading as intractable gallstone pancreatitis in a young adult

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Adolescent and young adult gastrointestinal (GI) cancers are on the rise. The often insidious nature of GI malignancies plus the rarity of such diseases in this age group places these individuals at risk for delayed diagnosis, and ultimately greater number of persons-years of life lost compared to average-aged adults.

A 27-year-old male without significant past medical history developed subacute, progressive epigastric pain, with outpatient CT scan of the abdomen and pelvis concerning for pancreatitis. This prompted a right upper quadrant (RUQ) ultrasound, which demonstrated many gallstones with sludge and small amounts of ascites. He was directed to the Emergency Department (ED), where his laboratory markers were notable for AST 97 U/L, ALT 265 U/L, alkaline phosphatase (ALP) 198 U/L, amylase 304 U/L, lipase 852 U/L, total bilirubin 3.5 mg/dL, and direct bilirubin 2.2 mg/dL. The patient was admitted to the hospital medicine service and the GI team was consulted for management of gallstone pancreatitis with suspected choledocholithiasis. The patient underwent a technically challenging endoscopic retrograde cholangiopancreatography (ERCP) that demonstrated distal common bile duct stricture requiring stent placement. After clinical improvement, he was discharged home with GI and surgery follow-up. However, within one week, he required re-admission secondary to increased pain. On retrospective chart review, he was noted to have lost 17lbs over a one-month period. Labs on re-admission demonstrated elevated amylase 360 U/L, lipase 743 U/L, total bilirubin 2.1 mg/dL, AST 29 U/L, ALT 42 U/L, and ALP 149 U/L. RUQ ultrasound showed cholelithiasis without cholecystitis. A repeat CT scan of abdomen showed no evidence of rim-enhancing collection, hemorrhagic pancreatitis, or necrosis. MRI abdomen and MRCP were negative for anatomic anomaly. He had negative autoimmune and infectious hepatitis work-up. Kidney biopsy revealed acute tubular necrosis and liver biopsy showed nonspecific findings without evidence of cirrhosis. A repeat ERCP was attempted; however, due to severe duodenal edema, it was converted to esophagogastroduodenoscopy with duodenal biopsy, which demonstrated poorly differentiated adenocarcinoma of duodenal, biliary, or pancreatic origin.

Over the course of three months, the patient's course was complicated by protracted pancreatitis, renal failure, and severe malnutrition. He was intubated for airway protection. Additionally, he developed abdominal compartment syndrome necessitating therapeutic paracentesis; fluid cytology was unremarkable but grew polymicrobial species. The patient developed multi-organ failure and septic shock. Comfort measures were pursued and the patient subsequently passed.

We demonstrate a rare case of primary GI adenocarcinoma in a young adult whereby the underlying diagnosis was masked by features of gallstone pancreatitis. Acute pancreatitis may be the first presenting sign of GI malignancy. Thus, tumor-associated pancreatitis should be considered when initial diagnostic workup for pancreatitis is unrevealing or if the clinical course is atypical. Timely recognition of tumor can lead to improved patient outcomes.