Painless Obstructive Jaundice: Pancreatic Adenocarcinoma Cannot Be Excluded

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Introduction

 Autoimmune pancreatitis (AIP) is a condition of chronic inflammation that typically presents with abdominal pain, jaundice, and weight loss. It is a relatively uncommon cause of pancreatitis that is highly responsive to treatment with corticosteroids. The diagnosis can be difficult to obtain and relies on both bloodwork and imaging. We present a case of painless obstructive jaundice complicated by a mass on the pancreatic head.

Case Presentation

- A 57-year-old-male with no past medical history presented with mild vague abdominal pain, pruritis, and clay-colored stools. Vital signs were unremarkable and lab investigations revealed ALP 515 U/L, ALT 732 U/L, and an elevated total bilirubin at 7.6 mg/dL.
- RUQ US showed an enlarged gallbladder and dilated common bile duct (1.9 cm) down to the level of the pancreatic head.
- Endoscopic ultrasound which revealed a 3.2 x 3.7 cm hypoechoic mass in the head of the pancreas obstructing the bile duct, two enlarged lymph nodes in the area near the bile duct, marked dilation of bile duct, and an enlarged gallbladder filled with sludge. FNA was attempted but was complicated due obstruction of the lymph nodes by the dilated bile duct. Pathology reported 'inconclusive, scattered epithelium with mild atypia', 'a well differentiated adenocarcinoma cannot be excluded.'
- ERCP showed stricture of bile duct consistent with a pancreatic head mass, and a stent was placed.
- CT abdomen and pelvis confirmed a 3 cm pancreatic head mass.
- Further lab investigations revealed a normal IgG4 and a mildly elevated CA 19-9 level of 194 U/mL.
- Throughout work-up, the patient was found to be losing weight rapidly and became visibly jaundiced with scleral icterus.
- Patient was offered three different treatment options: a trial of steroids, repeat EUS with FNA or a pancreaticoduodenectomy.
- Patient proceeded with EUS with FNA. Repeat biopsies revealed rare degenerated epithelial cells.
- Patient then elected for a salvage trial of three weeks of high dose steroids.
- Follow-up CT eight weeks later showed resolution of pancreatic mass. CT findings were confirmed with repeat EUS/ERCP and a normal CA 19-9 level of 13 U/mL. The patient continued to show clinical resolution of all symptoms in subsequent appointments without any further exacerbations or complications of AIP.

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Imaging



Figure 1. CT abdomen and pelvis showing a 3.2×3.7 cm mass at the head of the pancreas.



Figure 2. Repeat CT abdomen and pelvis eight weeks later showing resolution of previously noted pancreatic mass after patient was treated with a course of high dose steroids.

Discussion

- Autoimmune pancreatitis is a rare cause of pancreatitis that is typically categorized as Type 1 AIP or Type 2 AIP.
- In the case presented, the histopathology was inconclusive and the IgG4 levels were within normal limits therefore the subtype is designated as autoimmune pancreatitis not otherwise specified^{1,5}. This subtype of AIP is very rare with little known about the disease or the clinical progression.
- Glucocorticoid therapy is recommended after the patient has completed a negative workup for pancreatic cancer however at this time there are no definitive guidelines regarding when to initiate steroids in an atypical case such as the one presented. A two week course of steroids has been shown to aid in the diagnosis of atypical AIP^{3,4}.
- The recommended dosage of prednisone is 0.6 mg/kg, patient's report a rapid resolution of symptoms including abdominal pain and jaundice after initiation of steroids².
- Repeat imaging in patients with a positive response to therapy is recommended four to six weeks after therapy to assess for radiological improvement.

Conclusion

 Although painless obstructive jaundice with a pancreatic mass is a typical presentation for a pancreatic neoplasm; it is not the only possible diagnosis. Despite biochemical and radiographic evidence suggesting a malignancy; if AIP remains in the differential, a trial of steroids may be warranted to avoid unnecessary surgical intervention and associated morbidity.

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