Intrasplenic Pancreatic Pseudocyst: A Case Report

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Introduction:

Intrasplenic pseudocysts have been a rare occurrence in medicine since they were first described in 1941 by Roton et al. as an intrasplenic cyst in an ectopic pancreas. To date there have been over 40 cases of intrasplenic pancreatic pseudocysts that have been reported in the literature and the majority were unsuspected prior to surgery. We report a case of a patient with splenic rupture caused by an intrasplenic pseudocyst and describe his operative course.

Case Report:

A 51 year old Hispanic male presented to our emergency department with colicky abdominal LLQ pain. He was positive for nausea and non-bloody, bilious vomiting as well as loose stool for five days. He has a past medical history of hypertension, a unilocular pancreatic pseudocyst which was drained 5 months prior, chronic alcoholic pancreatitis, and fatty liver disease. He has a 40 pack year history as well as severe alcohol abuse (16 oz vodka daily). On physical exam he is found to have tenderness to the left lower quadrant, and mild clubbing of his fingers. WBC 11.2; H/H 12.8/37.3; Lipase 125; Amylase 272. CT done (see figures 1 & 2). Intervventional radiology was consulted and performed a CT guided splenic drainage of 30mL of sanguineous fluid which later proved to be aseptic, and a splenic drainage catheter was left in place.

Three days later the patient spiked a temperature of 101.8°F and became slightly tachycardic (repeat CT shown). Amylase level of splenic drainage was 48,889. Patient was taken to the operating room for an urgent splenectomy. He was diagnosed with intrasplenic pseudocyst with auto-digestion of the spleen with capsular invasion and ultimate splenic rupture. Histopathology (figure 4-5) showed a ruptured spleen with extensive acute splenic infarcts, as well as an organizing thrombus in the splenic vein. Postoperative course was uneventful and patient was discharged home on postop day 12 with routine follow-up in general surgery clinic.

Discussion:

There are many late and diverse complications of acute on chronic pancreatitis. Splenic involvement in pancreatitis is found approximately 1-5% of the time and is usually followed by multiple episodes of acute pancreatitis. Splenic pseudocysts are at times quiescent and are often only found after they have ruptured. Hemodynamic instability is at times the initial presenting complaint due to massive hemoparitoneum, as was found in this case. There are several hypotheses of pseudocystic extensions into the spleen based on anatomical planes. Splenic capsular peritoneum is contiguous with the anterior surface of the pancreas and hence the free extension of pancreatic enzymes into the splenic capsule. Diagnosis is often made from the presence of pancreatic enzymes in the aspirate. Pathological confirmation is made by the lack of an epithelial lining, a comparable yet inherent feature of all pancreatic pseudocysts. Conservative treatment options are limited due to the critical and unstable nature of this problem. Therefore, the need for an immediate and curative splenectomy is imperative.

References: