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IMAGES IN PANCREATOLOGY

Rupture of splenic artery pseudoaneurysm

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Splenic artery pseudoaneurysm (SAP) is a rare condition. In a literature review carried out by Tessier et al. in the MEDLINE database, only 157 cases were identified [1]. SAP most commonly occurs secondary to pancreatitis. The proteolytic pancreatic enzymes lead to the formation of pseudoaneurysm, as a result of enzymatic injury to the splenic artery wall after a pancreatitis crisis. Although the reported SAP hemorrhage rate is high, the peritoneal cavity is not a frequent site of bleeding, as observed in this research, with only twelve cases reported [1,2]. The most common form of bleeding is probably rupture into a pseudocyst, with possible bleeding through the pancreatic duct. Other sites of bleeding are the gastrointestinal tract, pseudocyst or pancreatic duct [1].

The case of a 53-year-old man with chronic pancreatitis is presented herein, who seeked the emergency department with abdominal pain in the left upper quadrant, which had progressively increased over the previous four days, associated with normal hemodynamic state.

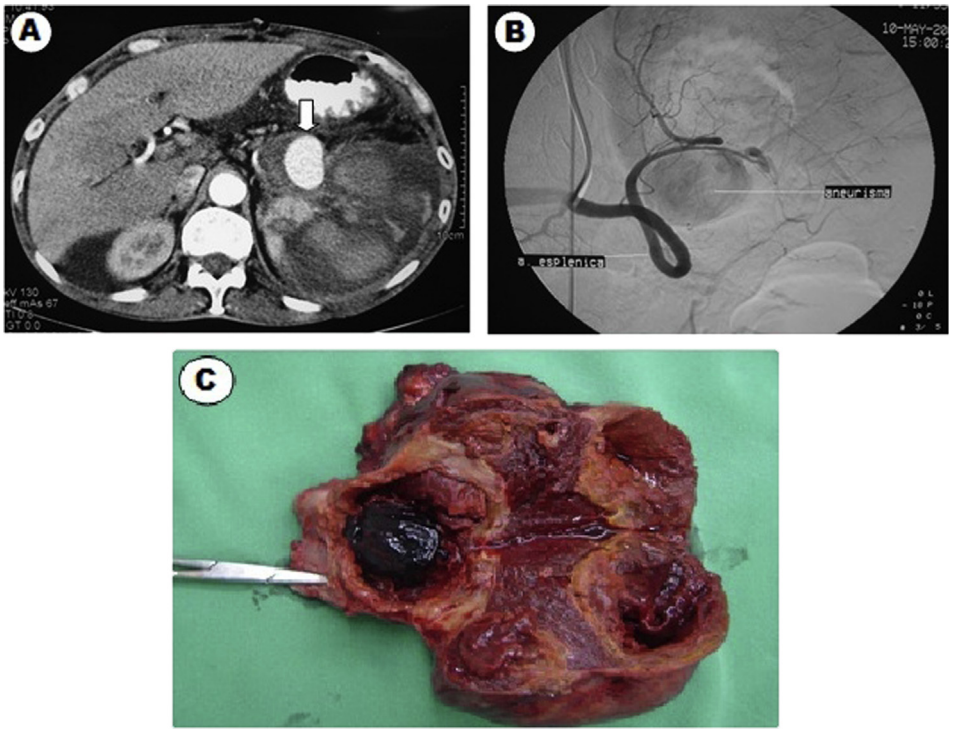

Fig. 1. A) Computed tomography image: pseudoaneurysm measuring approximately 4.0 × 4.5 cm and perisplenical hematoma. B) Arteriography of the celiac trunk: splenic artery pseudoaneurysm. C) Splenic artery pseudoaneurysm specimen with a clot.

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There was no history of external traumatisms. Medical history included alcoholism and left nephrectomy (realized eight years before due to pyelonephrosis caused by nephrolithiasis). Laboratory tests showed leukocytosis (17,700/μL) and anemia (hemoglobin 7.8 gr/dl). Blood amylase and liver enzyme levels were normal. A chest radiography indicated a left-sided elevation of the diaphragm. IV contrast-enhanced computed tomography of the abdomen was performed (Fig. 1A).

Due to the context of high intensity abdominal pain associated with the findings of perisplenical hematoma and leukocytosis, the patient was submitted to an exploratory laparotomy. During the intraoperative period, hemoperitoneum and perosplenical hematoma were evidenced with no signs of active bleeding or intraperitonial infection. A conservative treatment was chosen and surgery was concluded.

The patient was discharged two weeks later, after undergoing a selective arteriogram of the splenic artery performed on an outpatient basis, which showed a thrombotic occlusion of the pseudoaneurysm (Fig. 1B). Embolization of the splenic artery pseudoaneurysm was carried out utilizing biological glue (*Hystoacril*).

After one month of the initial context, the patient started suffering from daily fever associated with recrudescence of abdominal pain. Again, the hemogram test showed leukocytosis. Due to suspicions of infection, a new exploratory laparotomy was carried out and the patient was submitted to a distal pancreatectomy (Fig. 1C).

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