Cystic illusion: superior mesenteric vein aneurysm thrombosis mimicking a pancreatic cyst

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Aneurysms of the splanchnic arteries are common. However those of the veins are practically rare. They can be congenital (due to persistent vitelline vein) or acquired (due to pancreatitis or cirrhosis) [1]. Complications can be thrombosis or rupture. Management would include watchful expectancy or aneurysmorrhaphy or aneurysmal resection. In case of thrombosis thrombectomy or thrombolysis or just anticoagulation can be attempted [1,2].

A 65-year-old female presented for evaluation of upper abdominal pain. Her clinical examination was normal. Serum amylase and lipase were normal. Contrast-enhanced computed tomography (CECT) of the abdomen showed a 35 mm cystic lesion around the mid body of the pancreas (Fig. 1) and she was referred to our center as “pancreatic cyst” requiring resection.

A careful evaluation of the CECT showed that the lesion was in fact extra-pancreatic; a hypodense thrombus within an aneurysmal dilatation of the superior mesenteric vein (SMV) measuring 35 mm and mimicking a “pancreatic cyst”. She was negative for protein C deficiency, protein S deficiency, antithrombin III deficiency, factor V Leiden mutation, prothrombin G20210A, hyperhomocysteinemia and antiphospholipid antibodies. Antinuclear antibody and anti cytoplasmic nuclear antibody were negative. Treatment with warfarin for 3 months after a prior low molecular weight heparin bridging showed gradual resolution of thrombus with decrease in the size of the aneurysm (Fig. 2, coronal view). Thus a surgery was averted.

Figure 1 Contrast-enhanced computed tomography of the abdomen showing cystic lesion in the head of the pancreas

Figure 2 Contrast-enhanced computed tomography of the abdomen one month later showing partial resolution of thrombus in the superior mesenteric vein with decrease in size

References