PANCREATIC SOLID PSEUDO PAPILLARY EPITHELIAL NEOPLASM (SPEN)-A CASE REPORT
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Abstract: Solid and papillary epithelial neoplasm (SPEN) of the pancreas is an uncommon low grade malignant tumor. It is usually found in young women. We present a case of this rare pancreatic tumor.

Keyword: SPEN, YOUNG FEMALE, WELL ENCAPSULATED, CENTRAL CYSTIC HEMORRHAGIC DEGENERATION

INTRODUCTION:
The pancreatic solid pseudo papillary epithelial neoplasm are extremely rare and thought to account for 1-2% of exocrine pancreatic tumours. They tend to present in young non-Caucasian females around the 2nd and 3rd decades of life. Most patients are asymptomatic at diagnosis. They may occasionally present with a gradually enlarging abdominal mass or vague abdominal pain. This report presents a case of biopsy proven solid pseudo papillary epithelial neoplasm of pancreas.

CLINICAL DETAILS:
A 22 years female presented with complains of progressive abdominal discomfort and lump in abdomen since 4 months. There was no history of vomiting, severe abdominal pain or jaundice.

IMAGING FINDINGS:

Fig 1: Ultrasound Abdomen shows well defined encapsulated echogenic mass lesion (arrow) with central cystic areas (arrow head) in the tail of pancreas.

Fig 2: Plain CT scan Abdomen shows large well defined solid hypodense mass lesion without any calcifications and cystic areas in the distal portion of the body and tail of pancreas.

Fig 3(top) & Fig 4(bottom): Contrast CT Axial (fig 3) and Coronal (fig 4) shows peripheral enhancing solid components with central few nonenhancing cystic spaces.

Fig 5: MRI Abdomen T1 weighted images shows well defined homogenous hypointense lesion in body and tail of pancreas.

Fig 6: MRI Abdomen T2 weighted images shows well defined T2 hyperintense lesion in body and tail of pancreas

Ultrasound abdomen (fig 1) shows well defined encapsulated echogenic mass lesion with central cystic areas due to hemorrhagic degeneration in the body and tail of pancreas. CT scan abdomen shows large well defined solid hypodense mass lesion (fig 2) without any calcifications and cystic areas in the distal portion of the body and tail of pancreas. There was clear preservation of fat plane between the mass and surrounding structures. Head of pancreas appeared normal. Pancreatic duct is not dilated. No evidence of lymphadenopathy or calcification or...
liver metastasis noted. Following IV contrast administration(fig 3.4), enhancing solid areas are noted peripherally, whereas cystic spaces are more centrally located. On MRI abdomen the lesion hypointense on T1(fig 5) and hyperintense on T2(fig 6)

**CT** shows a well-demarcated large pancreatic masses that are frequently in tail. The architecture of the mass varies from solid, homogenous muscle density, through mixed solid and cystic, to thick walled cyst, depending on the degree of hemorrhage and/or necrosis(4). In extreme instances of hemorrhage, both modalities well depict a thick-walled 'cyst' with a ragged inner margin. The CT numbers in the 'cysts' may be higher than water, correctly suggesting old blood and necrotic debris. The soft tissue attenuating portions of tumor demonstrate enhancement after administration of intravenous contrast. The lesion usually does not infiltrate into surrounding fat or organs and lymphadenopathy or liver metastasis is usually not seen. However, liver metastasis and invasion into adjacent organs have been reported previously (5). Many times fluid-debris levels noted within the tumor that correspond to cystic and hemorrhagic areas.

**T1 and T2 weighted MR images** show presence of heterogeneous areas of increased signal intensity. Areas of high signal intensity on T1 weighted images correspond to areas of hemorrhagic debris. High signal intensity areas on T2 weighted images correspond to cystic areas and in hemorrhagic areas. The solid areas of tumor without gross hemorrhage demonstrate high signal intensity on T2 weighted images(2) . Fluid-debris levels are also noted on MR images. **Angiography** generally shows a mildly vascular mass on celiac injections and a moderately vascular mass on super selective injections. **The differential diagnosis of SPEN** includes microcystic adenoma, mucinous cystic neoplasm, nonfunctioning islet cell tumor, pleomorphic carcinoma of the pancreas, calcified hemorrhagic pseudocyst and pancreatoblastoma.

**CONCLUSION:** Although the imaging findings of SPEN are not specific, they are highly suggestive in the appropriate clinical setting. A large well-encapsulated mass occurring in the body and tail of pancreas, with enhancing solid areas that are typically noted peripherally, with more centrally located cystic spaces due to hemorrhagic degeneration, in a young woman is virtually diagnostic.

**REFERENCES:**