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Solid Pseudopapillary Neoplasm of Pancreas

Jawharun Nisa

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ABSTRACT: Solidpseudopapillary neoplasm of the pancreas are mainly found in females and account for <2% of pancreatic tumors.They have nonspecific clinical presentation with vague radiological features and are often histologically benign.These neoplasms has specific immunostains which differentiates other tumors of pancreas.

KEYWORDS: Pseudopapillarytumor of pancreas,Immunostains.

I. INTRODUCTION:

Solid pseudopapillary neoplasia of the pancreas is an extremely rare epithelial tumor of low malignant potential.,predominantly affecting young women.SPN accounts for less than 1% to 2% of exocrine pancreatic tumors.Synonyms include solid and cystic tumor,solid and papillary epithelial neoplasm,papillary -cystic neoplasm, Hamouditumor and Franz tumor [1].

II. CASE REPORT:

Thirty -two year female presented with abdominal pain for 10 days.She had no other GI symptoms.No similar episodes in the past and no known comorbids.On examination patient was hemodynamically stable(PR-78/min,BP-120/70mmhg).

P/A-Vague mass was palpable on lying on right lateral position,firm in consistency.No abnormal findings in biochemical tests.CECT Abdomen showed ill definedheterogenous enhancing iso to hypodense mass lesion in the tail and distal body of pancreas(FIG -1).MRCP revealed benign heterointense solid lesion with calcification araising from tail of pancreas.Patient was taken up for Excision of pseudopaillarytumor of pancreas with distal pancreatectomy+PJ+JJ.Pseudopapillarytumor of 8x8 cm with necrotic debris found on the anterior surface of the pancreas.(FIG-2).

Histopathological report was consistent with Solid pseudopaillary neoplasm of pancreas(FIG-3).Immunohistochemistry,Negative for Cytokeratin 7,Chromogranin,Synayophysin(FIG-4).Postoperative period was uneventful.

III. DISCUSSION

Solid pseudopaillarytumor of the pancreas was first described by Frantz in 1959.SPN can occur in every part of the pancreas but they are slightly more common in the tail [2].Almost 90% of cases have point mutation in exon 3 of CTNNB1 which lead to nuclear accumulation of Beta -catenin as well as lymphoid enhancer -binding factor 1(LEF1),which can be demonstrated immunohistochemically. There is complete loss(or nuclear localization) of E-Cadherin expression [3].Grossly ,it appears as a large and encapsulated mass.Usually well demarcated from the remaining pancreas.Infact ,invasion of the adjacent organs(spleen,duodenal wall),is rare.Depending on the tumor position(head,body or tail of the pancreas),the differential diagnosis Includes Adrenal mass,pancreatic endocrine tumor,liver cyst or tumor or a pseudocyst . Abdominal ultrasound and CT show a well encapsulated ,complex mass with both solid and cystic components and displacement of nearby stuructures.EUS findings of solid papillary neoplasm shows a well definedhomogenous,hypoechoic mass with hyperechoic rim [4]. 10% tumors have already metastasized at the time of presentation.Most common sites for metastasis are the liver,regional lymph nodes,mesentery,omentum,peritoneum.According to the WHO Classification system, these are 1)solid pseudopapillary neoplasm with borderline malignancy potential 2)solid pseudopaillarycarcinomas.Criteria which distinguish potentially malignant tumors and which are classified as SP carcinoma are 1)Angioinvasion 2)Perineural invasion 3)Deep invasion of surrounding pancreatic parenchyma .Histological features such as extensive necrosis, nuclear atypia, high mitotic rate, immunohistochemistry findings of expression of ki-67 and sarcomatoid areas may be associated with aggressive behaviour [5]. First choice of treatment remains complete surgical resection since Solid papillary neoplasm is limited to the pancreas in over 95% cases and can be radically dissected.In case with suspected lymph node involvement lymphadenectomiesisdone.The

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role of neoadjuvant therapy in the treatment of SPN is unclear.Gemcitabine and radiotherapy is used either to downsize large tumors or to treat the rare case of unrectabletumors [6].In our patient,CT showed above mentioned findings and was taken up for surgery(resection of tumor with distal pancreatectomy+PJ+JJ, Postoperatively patient was sent for chemotherapy.

IV. CONCLUSION

Solid papillary neoplasm is a rare neoplasm that primarily affects young women. The prognosis is favourable even in the presence of distant metastasis .Although surgical resection is generally curative, A close follow-up is advised in order to diagnose a local recurrence or distant metastasis and choose the proper therapeutic option for the patient.

Declarations
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Ethical approval:None required

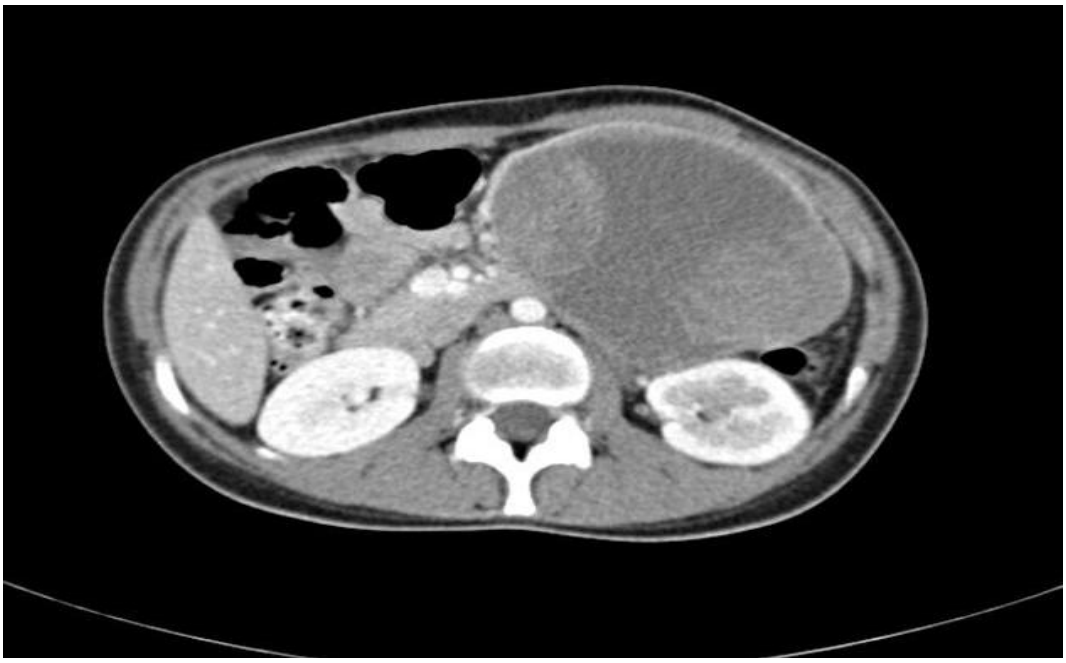

FIG-1(HYPODENSE LESION IN THE BODY AND TAIL OF PANCREAS)

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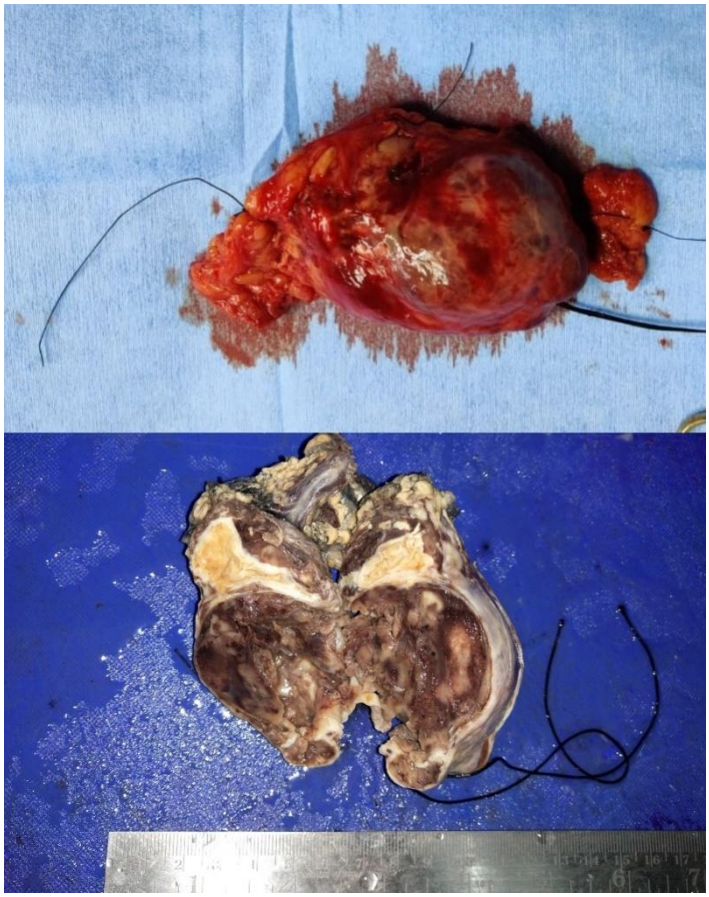

FIG -2(INTRAOPERTIVE-TUMOR WITH NECROTIC DEBRIS)

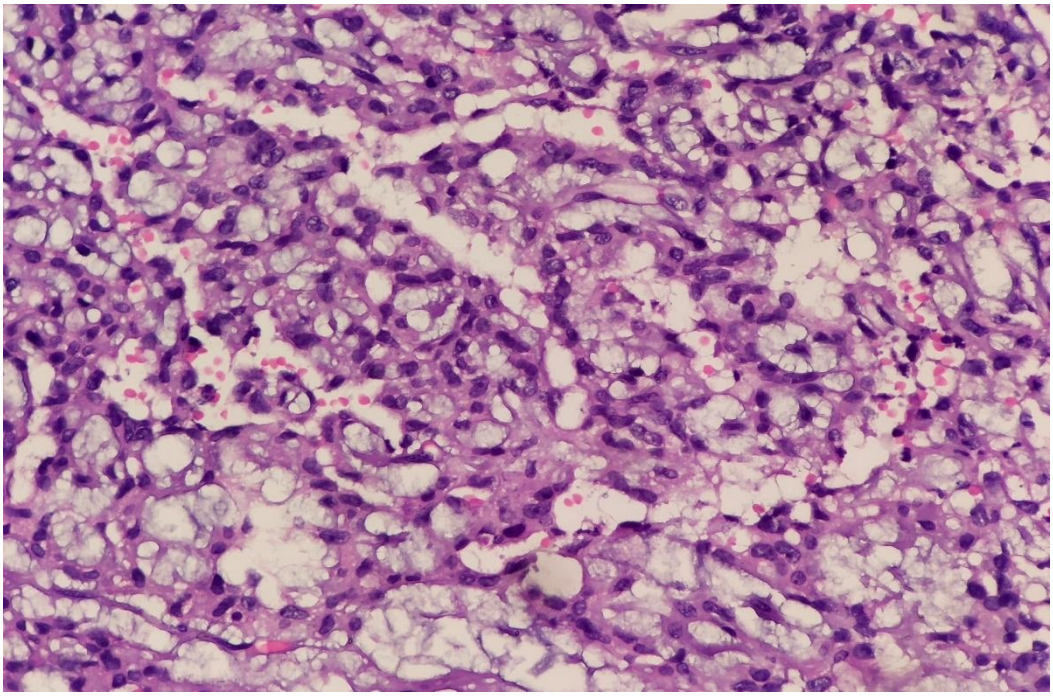

FIG-3(TUMOR WITH PSEUDOPAPILLARY AREA)

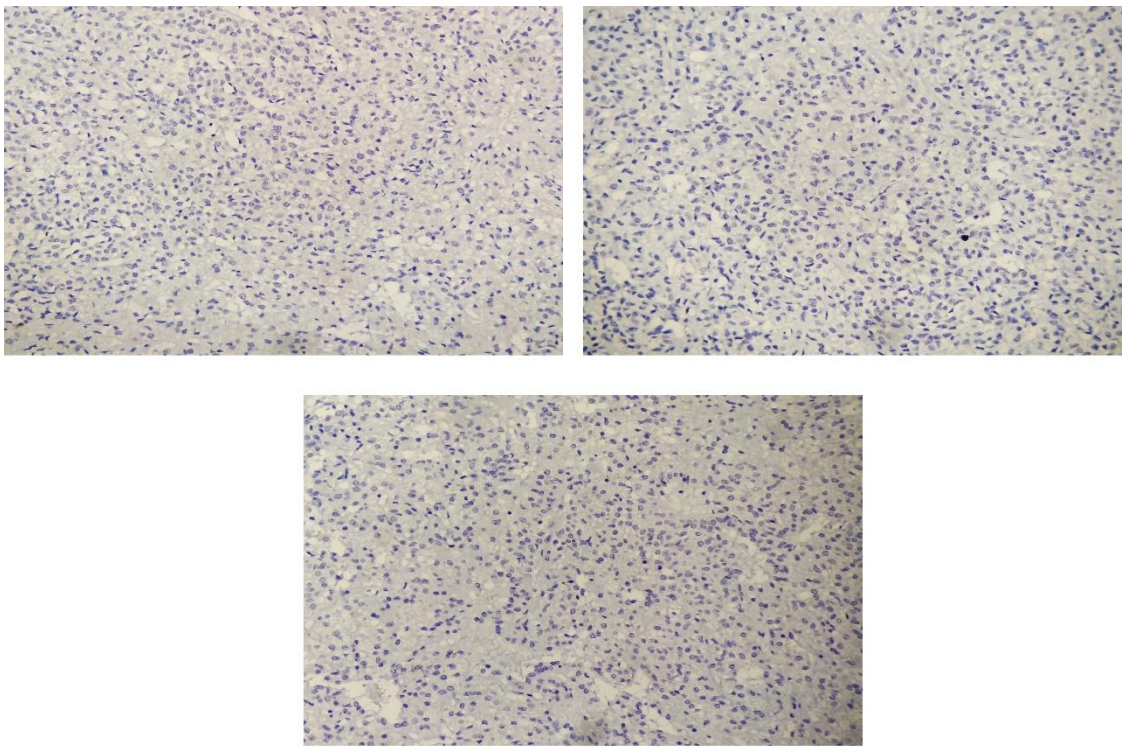

FIG-4(A.CHROMOGRANIN B.CYTOKERATIN C.SYNAPTOPHYSIN)

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