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Frantz Tumor, A Rare Neoplasm – Diagnosed on F.n.a.c.

KEYWORDS

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INTRODUCTION

Frantz tumor or Solid Pseudopapillary Neoplasm (SPN) is rare neoplasm of exocrine pancreas.[1] The cytological features are distinctive but due to rarity of the tumor may lead to misdiagnosis. We recently encountered a case of young women with abdominal lump and radiological diagnosis of ?leiomyoma ?GIST ?Lymphoma ??Pancreatic tumor. An ultrasound guided F.N.A.C. was done and slides obtained were stained with both giemsa and pap stain. Microscopic examination showed numerous papillary fragments along with other features of Frantz tumor. Histopathological examination of the specimen received, confirmed the diagnosis.

CASE REPORT

A 16yr old female presented with pain in right hypochondriac region since 6 months. On physical examination a palpable firm lump was found in the same region. MRI scan of upper abdomen showed a lump measuring 79mmx75mmx92mm in the region of lesser sac and compressing on adjacent gallbladder neck and gastric pylorus. On MRI a possibility of leiomyoma was suggested. CECT scan revealed a solid soft tissue mass along the inner aspect of loop of duodenum, measuring approx. 10.8x9x9 cm. An impression of ?GIST, ?Lymphoma with remote possibility of pancreatic tumor was rendered.

USG guided F.N.A.C. was done and slides obtained were stained with both giemsa and papanicolaou stain. On microscopic examination the slides were well cellular and showed numerous papillary tissue fragments with fibrovascular cores and multilayered lining by monotonous tumor cells with bland nuclei. At places cytoplasmic vacuolation and hyaline globules were seen. Few foamy histiocytes suggestive of cystic change were also identified. Background was hemorrhagic. Also seen in the background discrete tumor cells eosinophilic cytoplasm and bland, monomorphic eccentric nuclei.(**Fig 1**) Cytological diagnosis of Solid Pseudopapillary Pancreatic Tumor was suggested.

DISCUSSION

Solid Pseudopapillary neoplasm of pancreas is rare, accounting for 0.1 to 2.7% of all pancreatic tumors and mainly affects young females.[2-3] The tumor though was first described by Frantz in 1959, existed with different names such as Frantz tumor, Solid and papillary tumor, Papillary cystic tumor, Solid cystic and papillary epithelial neoplasm etc. till 1996 when the term Solid Pseudopapillary tumor was denominated on occasion of exocrine pancreas tumor classification.[4] It is an uncommon pancreatic tumor which shows enigmatic pattern from oncological and molecular perspective.[5]

Clinically tumor until very large causes few symptoms and patient usually presents with vague complaints like abdominal pain, weight loss etc.

Preoperative diagnosis of the tumor is very important as local surgical excision is usually curative. Radiological modalities are usually helpful but at time when definitive diagnosis is not possible, FNAC can be of great help if pathologist is aware of cytological features of this rare tumor.

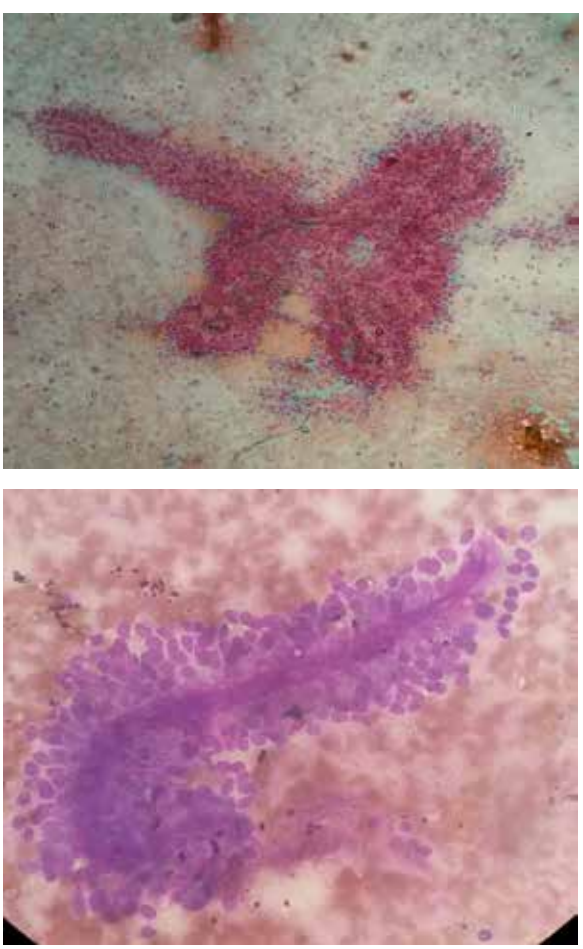


Fig 1: **Solid pseudopapillary neoplasm**. (Giemsa and Pap 40X).Papillary fragments with fibrovascular core and multi

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