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RESEARCH ARTICLE

SOLID PSEUDOPAPILLARY TUMOR OF PANCREAS: A CASE REPORT AND REVIEW OF LITERATURE

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Abstract

We report a case of a 21-year-old female patient with a solid pseudopapillary tumor of the pancreas, who presented with abdominal pain and vomiting. Imaging studies revealed a well-defined mass in the body of the pancreas, which was confirmed by biopsy. The patient underwent central pancreatectomy and had an uneventful postoperative course. Follow-up imaging showed no signs of local recurrence.

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Introduction:-

Solid pseudopapillary tumors of the pancreas (SPTP) are rare neoplasms that typically affect young women. Although they are usually indolent and have a favorable prognosis, surgical resection remains the mainstay of treatment. In this report, we present a case of solid pseudopapillary tumor of the pancreas and discuss its clinical features, diagnostic workup, and management.

Case Report:

A 21-year-old female with no prior medical history presented with a one-month history of abdominal pain and occasional vomiting. Physical examination revealed a large, firm, well-defined, and slightly tender mass in the epigastric region. Abdominal ultrasound and computed tomography confirmed the presence of a solid, round, well-defined corporal-caudal mass of the pancreas with hemorrhagic component, respecting principal pancreatic duct (figure 1). Laboratory tests, including pancreatic enzymes, alpha-fetoprotein, CA19-9, and ACE, were within normal range.

Surgical exploration and laparoscopic central pancreatectomy were performed (figure 2), and the pathological examination of the resected specimen confirmed the diagnosis of SPTP based on the expression of vimentin, alpha-1-antitrypsin, chromogranin, CD10, and beta-catenin by tumor cells. The patient had an uneventful postoperative course, and follow-up imaging at one year showed no signs of local recurrence.

Discussion:-

Solid pseudopapillary tumors of the pancreas are rare, accounting for less than 3% of all pancreatic neoplasms [1]. The clinical presentation of SPTP is usually non-specific, and imaging studies, including ultrasound and computed tomography, are crucial in establishing the diagnosis [2]. The pathological features of SPTP include solid and cystic areas, pseudopapillary structures, and fibrous stroma. Immunohistochemical analysis is necessary for accurate diagnosis, and SPTP typically expresses vimentin, alpha-1-antitrypsin, chromogranin, CD10, and beta-

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catenin, while anti-cytokeratin antibodies are negative[3]. Surgical resection is the treatment of choice for SPTP, and complete resection is associated with excellent long-term outcomes.

Conclusion:-

SPTP is a rare pancreatic neoplasm that typically affects young females and has a low malignant potential. Imaging studies and pathological examination, including immunohistochemistry, are necessary for accurate diagnosis. Surgical resection is the treatment of choice.

Conflict of interest statement:

The authors declare no conflicts of interest.

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Figures :



Figure 1:- Axial CT scan of the abdomen demonstrating corporal- caudal pancreatic mass with hemorrhagic component, respecting principal pancreatic duct.



Figure 2:- Laparoscopic image : corporal -caudal pancreatic mass.

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