EXPERT REVIEW

Clinicopathologic Features and Therapeutic Strategies of this Tumor of the Pancreas

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ABSTRACT

Pancreatic neuroendocrine tumours (NETs) can be benign or cancerous (cancer). When pancreatic NETs become cancerous, they are referred to as pancreatic endocrine cancer or islet cell carcinoma. Pancreatic NETs are substantially less prevalent and have a better prognosis than pancreatic exocrine tumours. Pancreatic cancer is frequently discovered after it has progressed. As a result, it is one of the main causes of cancer mortality. The pancreatic cancer survival rate after one year is higher. After five years, that rate reduces to around 6%. Some pancreatic growths are merely benign (not cancerous), while others, if left untreated, may develop into cancer over time (known as pre-cancers). The Whipple surgery is used to treat cancers and other pancreatic, intestinal and bile duct diseases. It is the most commonly utilized surgery to treat pancreatic cancer that has spread to the pancreas's head.

INTRODUCTION

Solid Pseudopapillary Tumor (SPT) of the pancreas is a rare tumour with an unknown histogenesis that is distinguished by a cystic and solid pattern of growth with the creation of pseudopapillae. SPT, which accounts for just a small percentage of pancreatic neoplasms, typically affects young women, while occurrences in older patients and men have been described. Because the majority of cases are treated by simple but full surgical resection, the tumour is regarded to have low-grade malignant potential. Accurate diagnosis requires knowledge of the neoplasm's distinct morphologic and demographic features. We examine the clinical and pathologic features that can help distinguish SPTs from other primary pancreatic tumours in this article [1].

Despite the fact that the clinicopathologic aspects and therapeutic options of this tumour have been well researched, there are still many unsolved concerns about this disease. Based on reported cases of this tumour, issues in the diagnosis and treatment of mucin-producing tumour were investigated in this study. The overall 5-year survival rate for resected cases is significantly greater than for typical duct cell carcinoma. These findings show that patients with this malignancy have a bad prognosis if it spreads to other organs. Furthermore, when the tumour spreads beyond 6 cm, the prognosis is substantially poorer than when the tumour spreads inside 6 cm. The need of detecting K-ras mutations in pancreatic juice for detection of this tumour in the body, as well as the challenges of duodenum-preserving pancreatic head resection, is emphasized [2].

Solid-Pseudopapillary Tumour of the Pancreas (SPTP) is a rare low-grade malignant epithelial tumour that primarily affects adolescent girls and young women. The clinical characteristics of this neoplasm, however, are quite distinctive, and SPTP should be considered in any young woman with a cystic or partly cystic pancreatic tumour. The cytologic features of seven cases of SPTP evaluated by preoperative fine-needle aspirates are described in this paper. On this basis, a cytologic diagnosis of SPTP can be made with high confidence, not only in clinically typical cases, but also in uncommon ones, such as in older patients, men, ectopic placements, and metastatic sites. Despite its distinctive microscopic appearance, the immunophenotype is not unique and does not correspond to any normal pancreatic cell type. Ultrastructural researches have also failed to discover distinct distinguishing traits. Nonetheless, the biology of solid-pseudopapillary tumour is well understood. Even in the presence of widespread disease, the tumour is indolent, with uncommon metastases to the liver or peritoneum and usually a lengthy survival [3].

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Desmoid tumours are clonal fibroblastic proliferations that originate in the deep soft tissues. They are also known as desmoid-type fibromatoses or aggressive fibromatoses. They are distinguished by infiltrative growth, a proclivity for local recurrence, and the inability to metastasize. A contrast-enhanced computed tomography scan revealed a well-circumscribed tumour in the pancreatic tail measuring 5.1 cm in a 63-year-old woman who complained of stomach pain. Pathological research revealed a mesenchymal tumour after a left-sided, spleen-preserving pancreatic resection. The diagnosis of a pancreatic desmoid tumour was made based on the tumor's appearance and immunological profile. The pancreatic desmoid tumour literature in English was reviewed. A total of 16 previous cases were discovered [4].

The pancreas is an exceptionally uncommon abdominal location for a solitary fibrous tumour (SFT). It frequently grows asymptomatically for a long period until a diagnosis based on symptoms and/or mechanical difficulties may be determined. This condition is difficult to diagnose due to its rarity and nonspecific clinical appearance. Based on the radiologic findings, cystadenocarcinoma was suspected, and a pancreatoduodenectomy was performed. The solitary fibrous tumour was diagnosed based on histology and immunostaining profiles. The patient died one week after surgery as a result of surgical complications. For a reliable diagnosis of cystic SFT of the pancreas, microscopic and immunohistochemical studies are required. [5].

CONCLUSION

Since there is limited data on the biological behaviour of SFT with extra-pleural location, the authors propose clinical follow-up for SFT treatment if the criteria for malignancy are not met. The only effective treatment for giant cell tumours is surgical resection. These tumours have a worse overall prognosis than pancreatic ductal adenocarcinoma, particularly the pleomorphic variety. More research is needed to document tumour care and results.

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