OPINION ARTICLE

Primary Pancreatic Malignancy: Clear Cell Adenocarcinoma Presenting as Acute Pancreatitis

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ABSTRACT

Pancreatic cancer is a condition in which malignant (cancer) cells develop in the pancreas' tissues. Pancreatic cancer risk is influenced by smoking and medical history. Jaundice, discomfort, and weight loss are all signs and symptoms of pancreatic cancer. Early detection of pancreatic cancer is challenging. Adenocarcinoma, also known as ductal carcinoma, is the most frequent kind of pancreatic cancer, accounting for more than 90% of diagnosis. This cancer occurs in the lining of the ducts in the pancreas. Adenocarcinoma can also arise from the cells that manufacture pancreatic enzymes.

INTRODUCTION

Gallstones are the most common cause of acute pancreatitis. Within a few days, more than 80% of the cases are resolved. Upper abdomen discomfort, increased lipase and/or amylase, and transabdominal ultrasonography findings are used to make the diagnosis. Early aggressive hydration, pain management, nutritional support, and progression monitoring are all necessary for treatment. Hypovolemia, systemic inflammatory response, pancreatic necrosis, and organ failure are associated with a high rate of death, recurrence, and progression to Chronic Pancreatitis (CP). For CP to develop, genetic susceptibility and recurrent injury may be required. Controlling pain and exocrine and endocrine symptoms is essential, as is reducing risk factors, particularly alcohol use [1].

Impact of Clear Cell Adenocarcinoma

The most prevalent kind of primary neoplasm found in pancreatic cancer is ductal adenocarcinoma, which has a poor prognosis. Clear cell carcinoma is most commonly connected with cancers of the kidney, ovary, or bladder, but it is only rarely related with cancers of the pancreas. Primary clear cell adenocarcinoma of the pancreas is a rare "miscellaneous" cancer, according to the WHO classification, with just a few examples recorded in the literature too far. Pancreatitis-related stomach discomfort. Following that, abdominal computed CT revealed a necrotic tumour in the pancreas neck with hepatic metastases. Pancreatic clear cell adenocarcinoma was diagnosed after further histological and immunehistochemical examinations. The patient was sent home to start a low-dose nab-paclitaxel and gemcitabine regimen [2].

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Risk of Pancreatic Cancer

Acute pancreatitis is a symptom of pancreatic cancer that can appear suddenly. The goal of this study was to determine the risk of pancreatic cancer following an acute pancreatitis episode. The number of people diagnosed with pancreatic cancer per 1000 person-years. The incidence rate per 1000 person-years for getting pancreatic cancer in those who did not acquire chronic pancreatitis. As a result, the risk of pancreatic cancer was nearly 9 times greater in individuals with chronic pancreatitis [3].

Primary Clear Cell Adenocarcinoma of Pancreas

Pancreatic primary clear cell carcinoma is relatively uncommon. Patients with a mass in the pancreas' distal body and tail. A distal pancreatectomy was performed on him. Tumor cells had abundant transparent cytoplasm and visible cell borders, according to histopathology. Antibodies against cytokeratin-7 caused responses in neoplastic cells; however antibodies against hepatocyte nuclear factor-1, carbonic anhydrase 9, synaptophysin, and chromogranin A caused no reactions. A primary clear cell carcinoma of the pancreas was later discovered in the patient. It's the first time we've come across it. This is a rare case report, and the current literature on this tumour has been updated [4].

Pancreatic Ductal Adenocarcinoma Concomitant

The spread of cancer to the pancreas is an uncommon occurrence. Renal cell carcinoma is one of the potential

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sites of pancreatic metastases. Renal cell carcinoma frequently metastasizes late and solely to the pancreas, indicating that renal cell carcinoma plays a unique function among primary that metastasis to the pancreas. Renal cell carcinoma may occur together with pancreatic ductal adenocarcinoma and be treated with folic acid, fluorouracil, irinotecan, and oxaliplatin for borderline-resectable pancreatic ductal adenocarcinoma, followed by complete pancreatectomy. The pancreatic body was found to have pancreatic ductal adenocarcinoma as well as two metachronous metastases of clear-cell renal cell carcinoma that occurred concurrently and cospatially with pancreatic ductal adenocarcinoma [5].

CONCLUSION

Renal cell carcinoma pancreatic metastases are uncommon, occurring decades after the original diagnosis of renal cell carcinoma. Renal cell carcinoma metastases and pancreatic ductal adenocarcinoma are much more uncommon. Clinicians, radiologists, and pathologists should, nonetheless, evaluate the possibility. The function of renal cell carcinoma as a location of pancreatic metastasis should be investigated further.

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