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Pancreatic Adenocarcinoma Correctly Diagnosed by EUS but nor CT or MRI

Authors : Yousef Reda

Abstract : Pancreatic cancer has an overall dismal prognosis. CT, MRI and Endoscopic Ultrasound are most often used to establish the diagnosis. We present a case of a patient found on abdominal CT and MRI to have an 8 mm cystic lesion within the head of the pancreas which was thought to be a benign intraductal papillary mucinous neoplasm (IPMN). Further evaluation by EUS demonstrated a 1 cm predominantly solid mass that was proven to be an adenocarcinoma by EUS-guided FNA. The patient underwent a Whipple procedure. The final pathology confirmed a 1 cm pT1 N0 pancreatic ductal adenocarcinoma. Case: A 63-year-old male presented with left upper quadrant pain and an abdominal CT demonstrated an 8 mm lesion within the head of the pancreas that was thought to represent a side branch IPMN. An MRI also showed similar findings. Four months later due to ongoing symptoms an EUS was performed to re-evaluate the pancreatic lesion. EUS revealed a predominantly solid hypoechoic, homogeneous mass measuring 12 mm x 9 mm. EUS-guided FNA was performed and was positive for adenocarcinoma. The patient underwent a Whipple procedure that confirmed it to be a ductal adenocarcinoma, pT1N0. The solid mass was noted to be adjacent to a cystic dilation with no papillary architecture and scant epithelium. The differential diagnosis resided between cystic degeneration of a primary pancreatic adenocarcinoma versus malignant degeneration within a side-branch IPMN. Discussion: The reported sensitivity of CT for pancreatic cancer is approximately 90%. For pancreatic tumors, less than 3 cm the sensitivity of CT is reduced ranging from 67-77%. MRI does not significantly improve overall detection rates compared to CT. EUS, however is superior to CT in the detection of pancreatic cancer, in particular among lesions smaller than 3 cm. EUS also outperforms CT and MRI in distinguishing neoplastic from non-neoplastic cysts. In this case, both MRI and CT failed to detect a small pancreatic adenocarcinoma. The addition of EUS and FNA to abdominal imaging can increase overall accuracy for the diagnosis of neoplastic pancreatic lesions. It may be prudent that when small lesions although appearing as a benign IPMN should further be evaluated by EUS as this would lead to potentially identifying earlier stage pancreatic cancers and improve survival in a disease which has a dismal prognosis.

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