

ESPGHAN

European Society for Paediatric Gastroenterology, Hepatology and Nutrition

IMAGE OF THE MONTH

03/2023

FROM YOUNG ESPGHAN

Shweta Dixit, Maria Sellars, John Devlin, Maesha Deheragoda, Tassos Grammatikopoulos, Deepak Joshi, David Reffitt, Robert Hegarty King's College Hospital London, United Kingdom

Pancreatic head mass diagnostic dilemma: inflammatory mass resembling neoplasm.

A 12-year-old girl was referred with a 1-week history of jaundice, itching and a loss of appetite. Abdominal ultrasound (US) revealed a mass in the pancreatic head measuring 4.1 cm in diameter and a dilated pancreatic duct measuring 3.2 mm. She had a pancreatic magnetic resonance imaging (MRI), which revealed a 2.7 x 4.1 x 5.1cm ill-defined, enhancing mass with restricted diffusion emerging from the head and uncinate process as well as extensive bile duct dilatation and pancreatic duct dilatation secondary to mass effect (Figure 1). The features were thought to be consistent with a pancreatoblastoma prompting an endoscopic ultrasound and endoscopic retrograde cholangiopancreatography.

After an endoscopic finding of lower common bile duct stricture (Figure 2), biliary sphincterotomy and stent placement were performed. The endoscopic biopsy showed features of chronic pancreatitis with no evidence of malignancy. For further delineation of the mass, an abdominal contrast enhanced computerised tomography (CT) scan demonstrated an enhancing, ill-defined pancreatic mass (Figure 3).

The appearance of the imaging was again suggestive of a neoplasm. A repeat endoscopic biopsy was performed due to a lack of consistency between imaging and biopsy results which confirmed a tissue diagnosis of chronic pancreatitis. (Figure 4)

Diagnostic imaging is an important tool to evaluate pancreatic neoplasms (1-3). For an accurate diagnosis and to avoid unnecessary surgery for inflammatory disorders, a repeat biopsy can play an essential role.

References:

- 1. Costache MI, Costache CA, Dumitrescu CI et al. Which is the best imaging method in pancreatic adenocarcinoma diagnosis and staging CT, MRI or EUS? Curr Health Sci J. 2017;43(2):132–6.
- 2. Santa LG de la. Radiology of pancreatic neoplasms: An update. World J Gastrointest Oncol. 2014;6(9):330.
- 3. Zhang L, Sanagapalli S, Stoita A. Challenges in diagnosis of pancreatic cancer. World J Gastroenterol. 2018;24(19):2047–60.











- Figure 1. MRI showing enhancing mass in the head of pancreas
- Figure 2. MRCP showing bile duct dilatation and stricture
- Figure 3. CT demonstrating neovascularisation of a mass at the head of the pancreas with bile duct dilatation.
- **Figure 4.** Pancreatic mass tissue showing periductal and intra-lobular fibrosis with some ductal epithelium showing reactive atypia appearance suggestive of chronic pancreatitis. No evidence of malignancy

