

# Uterine Cervical Squamous Cell Carcinoma : A Rare Cause of Biliary Obstruction

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## Introduction

- Metastatic lesions to the pancreas are uncommon.
- We present a case report of uterine cervical squamous cell carcinoma (SCC) with metastasis to the pancreas causing biliary obstruction diagnosed with endoscopic ultrasound-guided fine needle biopsy (EUS-FNB).

## Case Presentation

- A 51-year-old female with a past medical history of stage IVb uterine cervical SCC treated with chemoradiation six years prior presented with elevated aspartate transaminase (AST), alanine transaminase (ALT), and alkaline phosphatase (ALP) levels two times the upper limit of normal.
- Prior to presentation, patient was considered to be in remission in 2017 and undergoing surveillance Computed Tomography (CT) scans every 6 months.
- Four years later in 2021, surveillance CT imaging demonstrated new mural thickening of the midthoracic esophagus, pre-carinal nodal adenopathy and a 1.9 x 2.2 cm mass in the uncinate process of the pancreas.
- Follow-up Positron Emission Tomography (PET) imaging showed evidence of a new intense uptake in the pre-carinal space and new mildly hypermetabolic adenopathy in the chest and abdomen.
- Referred to thoracic surgery for bronchoscopy with endobronchial ultrasound (EBUS) with biopsy showing SCC consistent from recurrent SCC of the uterine cervix. Patient underwent further chemotherapy treatment at that time.
- Patient developed elevated AST, ALT, and ALP levels with values two times the upper limit of normal thereafter.

## Case Presentation (Continued)

- Patient underwent further evaluation with magnetic resonance imaging (MRI) of the abdomen which demonstrated a distal common bile duct stricture from enlarging peripancreatic lymph nodes.
- An endoscopic retrograde cholangiopancreatography (ERCP) with stent placement was performed for biliary obstruction secondary to distal common bile duct stricture (Figure 1).
- Follow-up PET imaging eight months after ERCP demonstrated enlarging pre-carinal mediastinal lymphadenopathy with elevated fluorine-18-fluorodeoxyglucose (F-18 FDG) uptake in the region of the pancreatic head, adjacent to the biliary stent (Figure 2).
- Patient was then referred for an endoscopic ultrasound (EUS), which showed a 21 mm x 20 mm hypoechoic lesion at the pancreatic head/uncinate process (Figure 3).
- A fine needle core biopsy was performed with pathology consistent with a pancreatic metastatic lesion secondary to keratinizing SCC subtype from uterine cervix (Figure 4). Patient was re-referred to oncology for immunotherapy with Keytruda.

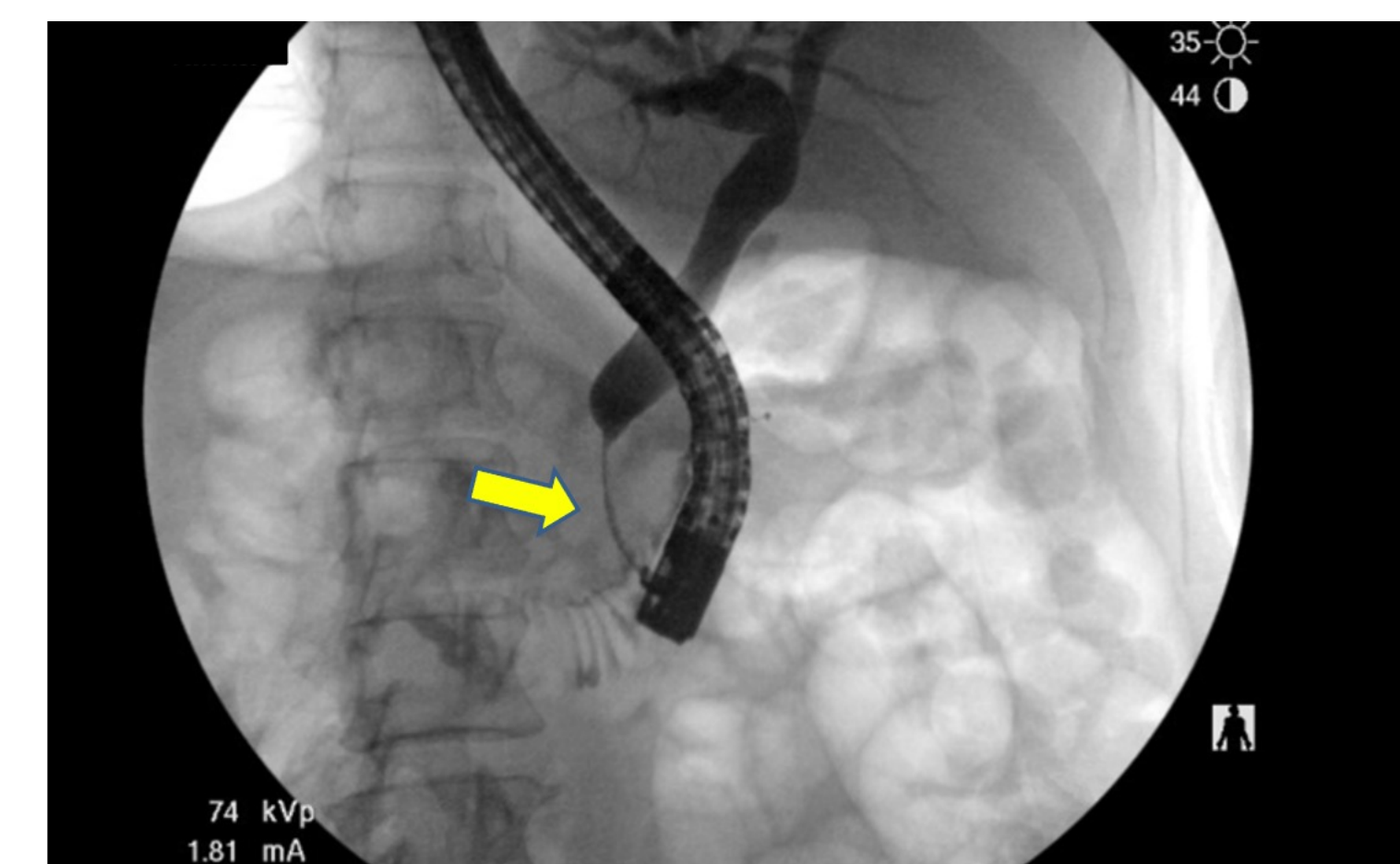


Figure 1: Endoscopic retrograde cholangiopancreatography (ERCP) with evidence of biliary obstruction secondary to distal common bile duct stricture (arrow)

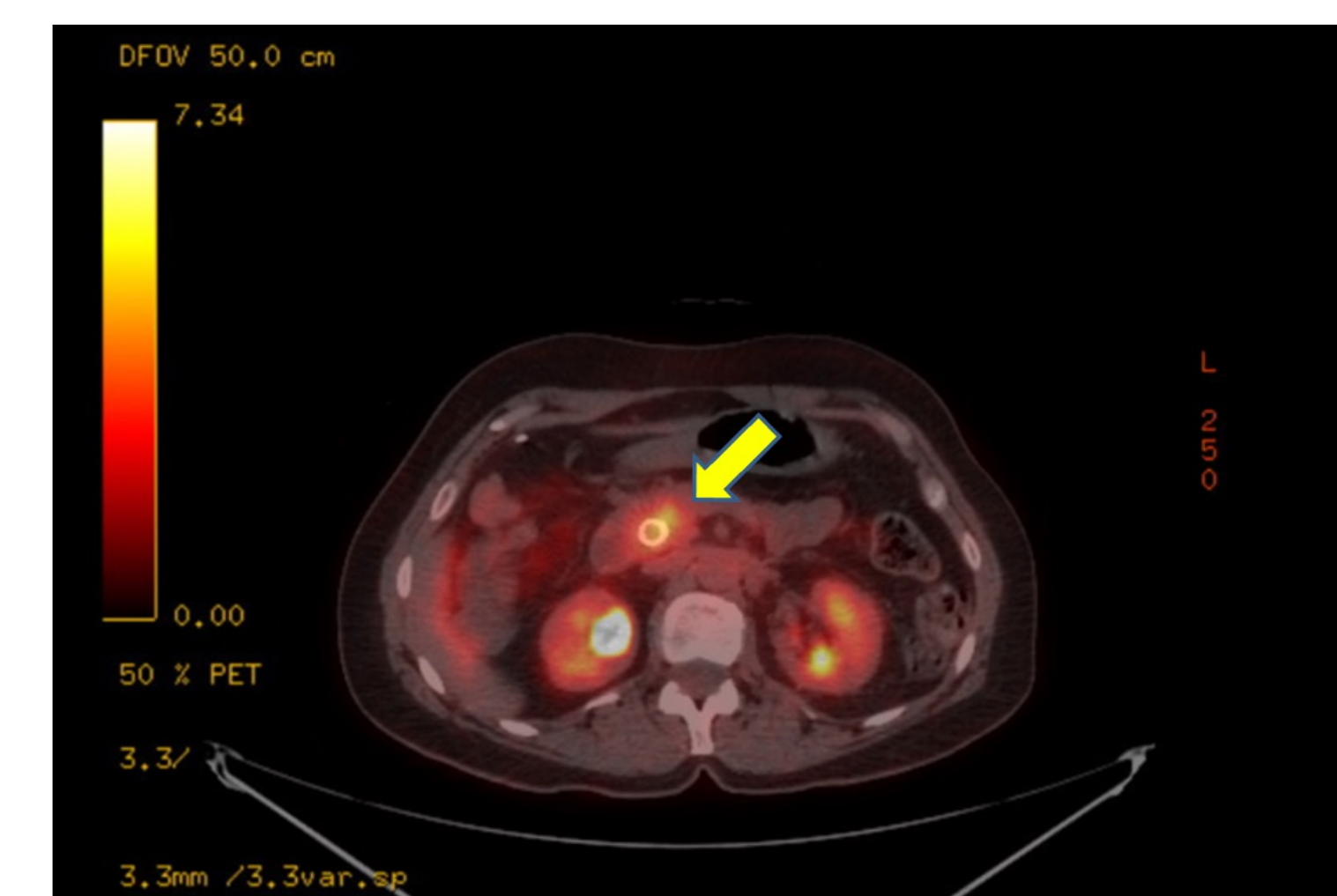


Figure 3: Positron Emission Tomography (PET) showing elevated Fluorine-18-Fluorodeoxyglucose (F-18 FDG) uptake in the region of the pancreatic head, adjacent to the biliary stent (arrow)

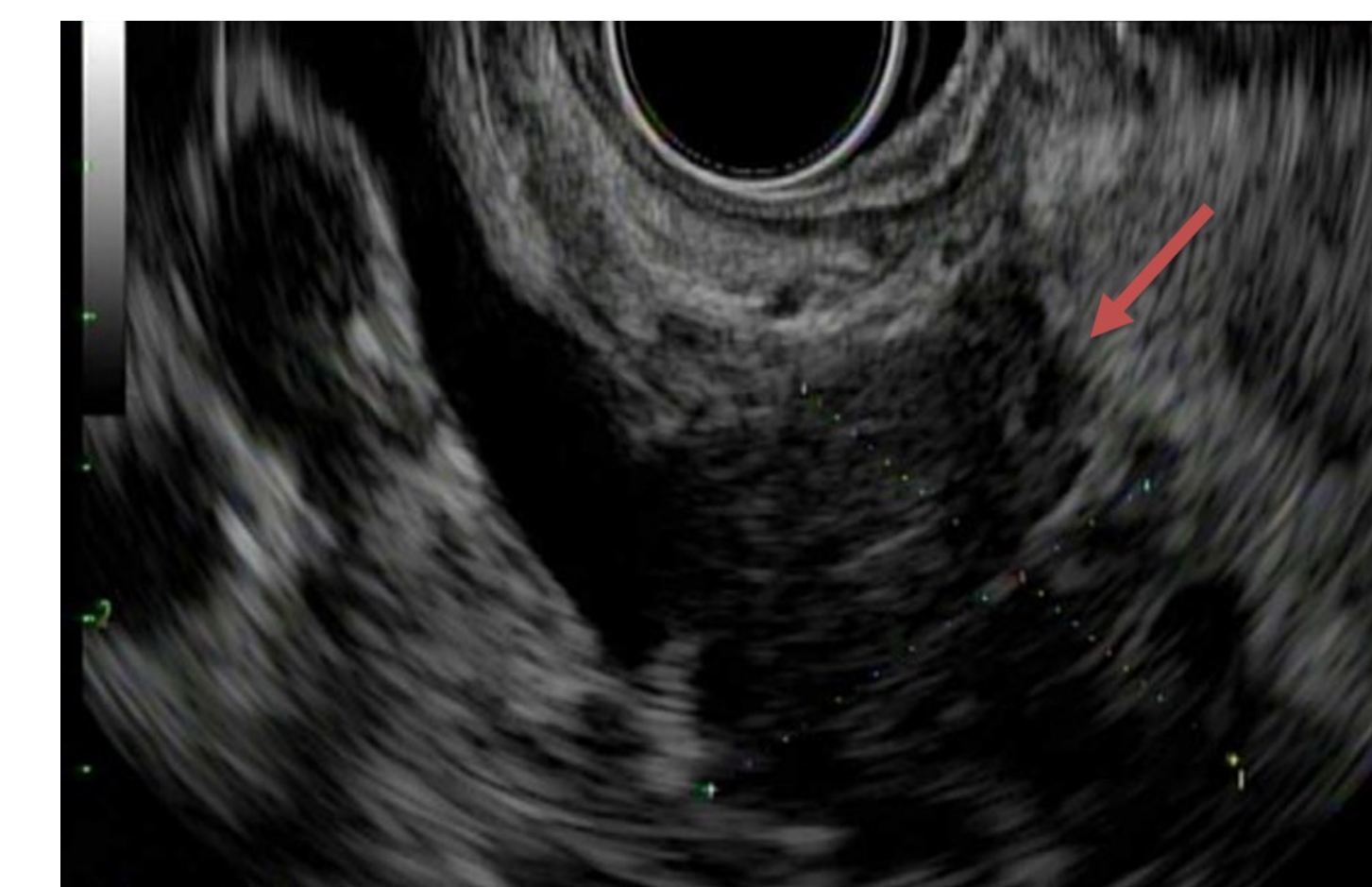


Figure 2: Endoscopic ultrasound (EUS) showing a 21 mm x 20 mm hypoechoic lesion at the pancreatic head/uncinate process (arrow)

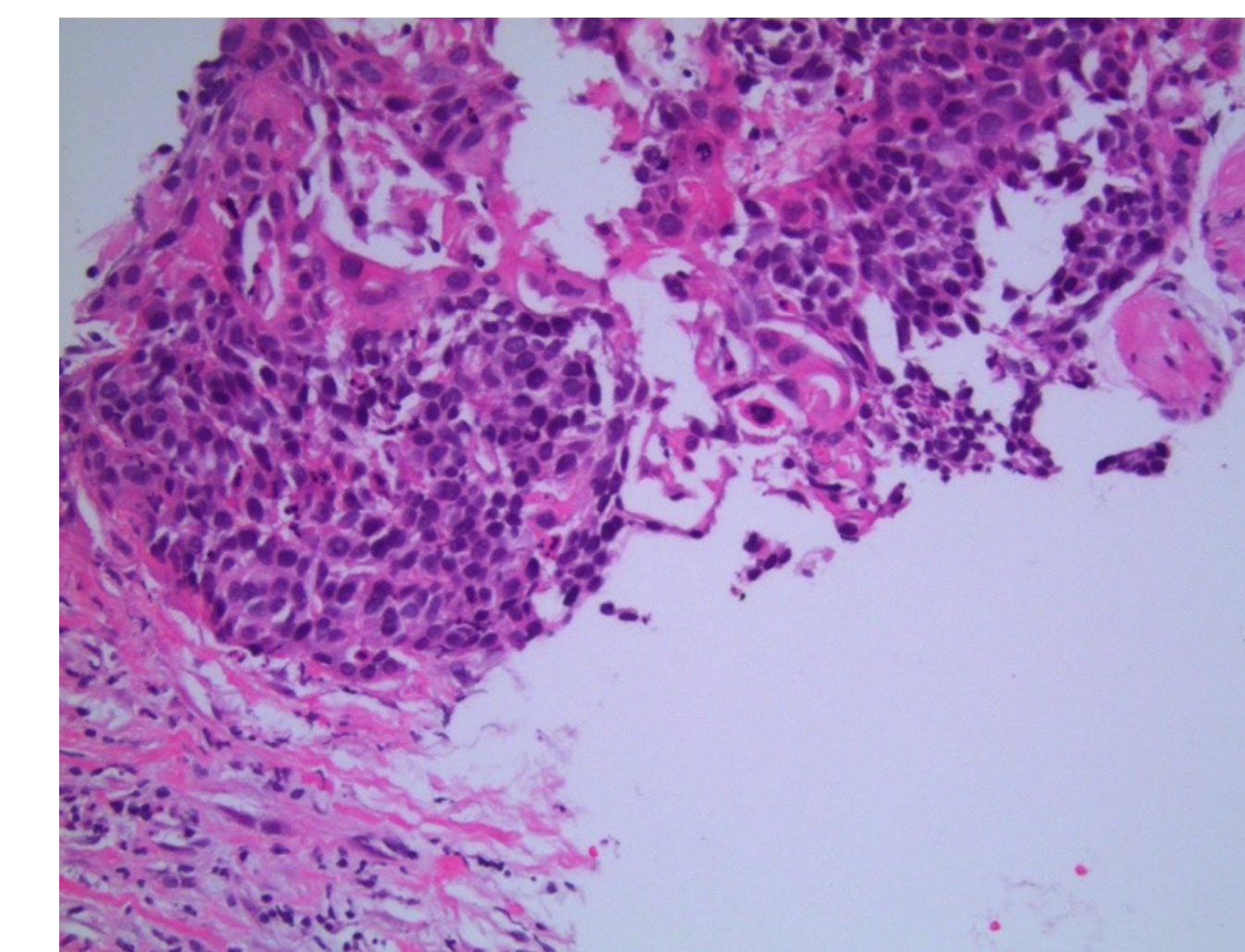


Figure 4: Pancreatic pathologic specimen showed pancreatic tissue involved by sheets of cells with round to oval and angulated nuclei, moderate amounts of dense eosinophilic cytoplasm, intercellular bridges, and focal keratin formation along with scattered mitoses, dyskeratotic keratinocytes and apoptotic debris. (Hematoxylin and eosin stain, 200x)

## Discussion

- This case reports a rare occurrence of SCC of the uterine cervix metastasizing to the pancreas causing biliary obstruction.
- To date, there are only two reported cases in the literature on SCC of the uterine cervix metastasizing to the pancreas causing obstructive jaundice making it extremely rare.
- This case report emphasizes the importance of differentiating primary pancreatic carcinomas from metastatic lesions to the pancreas from other primary sources.
- There are various imaging modalities for diagnosis such as PET, CT, MRI/MRCP, ultrasonography, and EUS.
- In our case we were able to identify a new mass in the pancreas with CT, MRI and PET imaging and diagnose it with EUS-FNB.
- The usage of EUS-FNB to achieve accurate histopathologic diagnosis is becoming more important to tailor specific management and treatment options for pancreatic tumors.

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Informed consent was obtained for this case report.