

INTRODUCTION

- Small Cell Lung Cancer (SCLC) is an aggressive high grade neuroendocrine carcinoma that accounts for 15% of all lung cancers and commonly seen in smokers.
- It usually presents with early distant metastatic spread on diagnosis however pancreas is an uncommon site of metastasis. We present a rare case of obstructive jaundice as the initial presentation of a patient with SCLC metastatic to the pancreas and liver.

CASE DESCRIPTION

- 62 year old gentleman presented to the ER with a past medical history of recurrent pancreatitis with abdominal pain, nausea and vomiting and jaundice.
- **LABS:** Labs on admission were notable for elevated total bilirubin at 16.4 mg/dL along with elevation in Alkaline Phosphatase at 547 IU/L and elevation in AST and ALT to 120 U/L and 144 U/L respectively.
- **IMAGING:** Imaging with CT followed by MRI abdomen showed focal enlargement of the pancreatic head with dilatation of the common bile duct and the main pancreatic duct along with innumerable rim-enhancing lesions within the liver consistent with metastasis (Figure 1)
- CT guided biopsy of liver lesion was performed which confirmed small cell carcinoma on pathology. Worsening jaundice prompted ERCP with EUS which showed a large mass at the major papilla site. (Figure 2)
- Pancreatic duct was cannulated and sphincterotomy was performed; however biliary cannulation could not be attempted due to the size of the mass and prior history of chronic pancreatitis cannulation.
- CT Chest was also done that showed a large right suprahilar mass with mass effect on the right main bronchus.
- Patient underwent IR guided PTC drain placement with appropriate decrease in bilirubin. Chemotherapy with Carboplatin/ etoposide was initiated for metastatic small cell cancer with spread to the pancreas and liver.



Figure 1: MRI Abdomen with contrast transverse image showing rim-enhancing lesions within the liver and focal enlargement of the pancreatic head with dilatation of the common bile duct and the main pancreatic duct .



Figure 2: Endoscopic imaging showing a large fungating mass was found at the major papilla

DISCUSSION:

- We present a rare case of obstructive jaundice as a primary presentation of SCLC metastatic to the pancreas and liver.
- Most common sites of SCLC metastasis on diagnosis are liver, bone, brain and lung^{1,2}. Spread to pancreas from SCLC is rarely reported in literature.
- As such, secondary metastasis to pancreas is uncommon and accounts for approximately only 2-10% of all pancreatic carcinomas.
- Of them lung cancer is the most common site of primary metastasis. Majority of patients with pancreatic metastasis are asymptomatic upon incidental diagnosis by abdominal CT.
- Pancreatitis and obstructive jaundice are seldom found on initial presentation, such as our patient.
- Jaundice can result from biliary ductal obstruction if SCLC spreads to lymph nodes in the porta hepatis or the pancreatic head.
- Endoscopic Ultrasound is more sensitive than CT or MRI in the diagnosis of pancreatic malignancy.
- Metastasis to pancreas typically indicates advanced disease and clinicians should consider palliative treatment with surgical biliary bypass and chemotherapy in select patient groups which has shown to lead to clinically significant increased mean survival time.

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