



Pancreatic Metastasis Secondary to the Master of Costumes, Renal Cell Carcinoma

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Introduction

For decades, renal cell carcinoma (RCC) has been one of the most studied cancers, and its metastatic capabilities are well documented in the literature. RCC accounts for 80% - 85% of primary renal neoplasm. Approximately 25% of individuals either have distant metastases or advanced locoregional disease at the time of diagnosis.¹ Primary resection of a tumor can result in the eradication of the disease. Its metastatic capabilities continue to be one of the most challenging aspects of the disease. Metastasis to the pancreas has been described in about 2% to 5% of all malignant pancreatic tumors.^{2,3}

Case Report

An 80-year-old male with a medical history of Stage IV RCC diagnosed more than ten years ago, with lung metastasis, S/P nephrectomy, COPD, arterial hypertension and CKD. The patient remained in surveillance for the past two years as immunotherapy was discontinued due to intolerance and frail state. He presents to the ER with a chief complaint of intractable pruritus and jaundice. Initial evaluation with CT abdomen revealed biliary ductal dilation and mass-like prominence in the pancreatic tail. MRCP subsequently revealed extensive lymphadenopathy causing extrinsic compression and encasement of the common bile duct.

Table 1. Laboratory Values

	Pre-Admission	Admission
AST	24	269
ALT	21	572
Alkaline Phosphatase	80	872
Total Bilirubin	0.3	2.8
Indirect Bilirubin	-	2.0
GGT	-	988

Endoscopic Approach

An EUS 22g fine needle was advanced through the gastric wall into the pancreas tail and into the gastro-hepatic ligament mass under EUS guidance multiple aspirates were obtained. Tumoral cells from gastro-hepatic mass, duodenum polyp and pancreas aspirates were immunoreactive to CD10 and PAX-8, and negative for CK7, compatible with metastatic Renal Cell Carcinoma. ERCP performed; a palliative Wall Flex™ 10 mm x 60 mm fully covered metallic stent was placed.

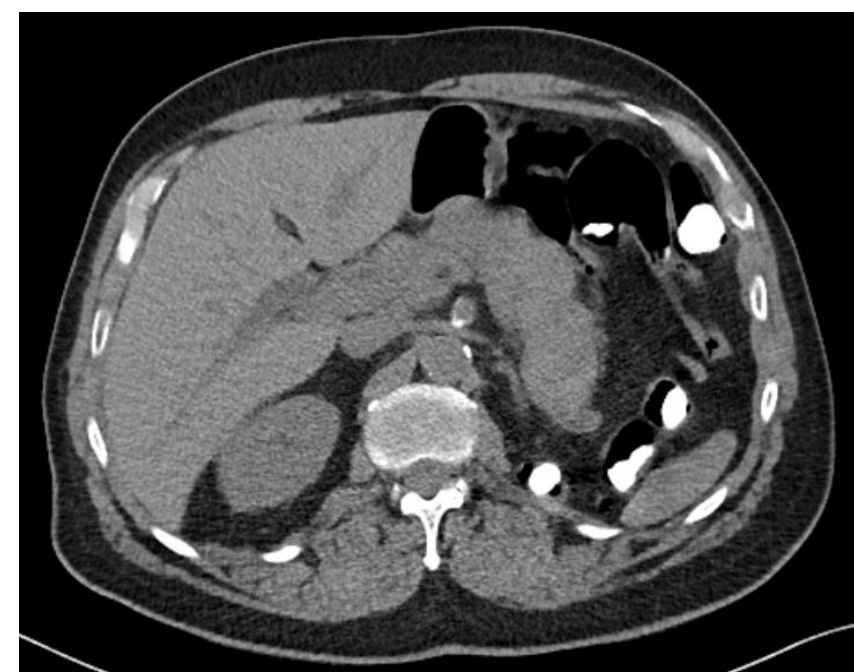


Figure 1. Abdominopelvic CT scan without contrast showing intrahepatic biliary ductal dilatation and a mass-like prominence of the pancreatic tail.

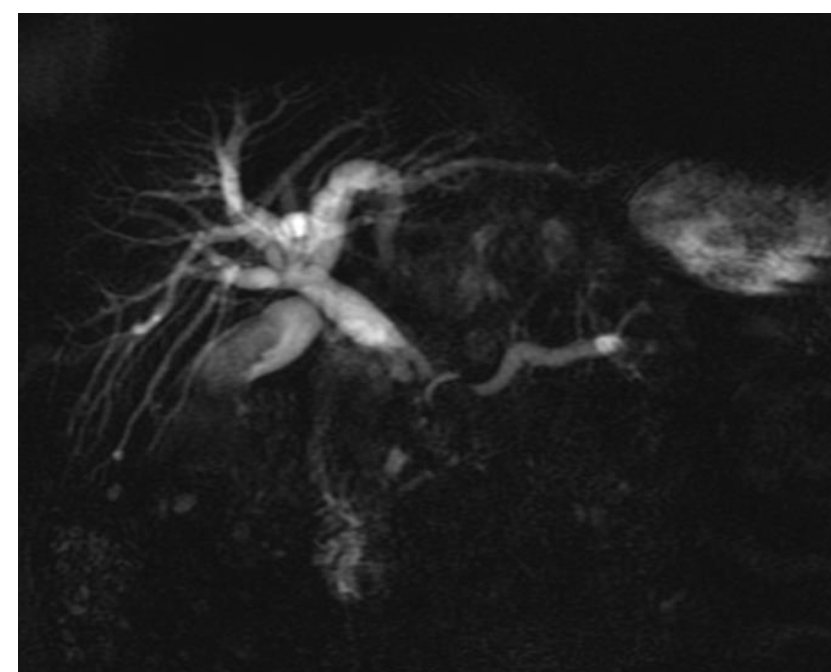


Figure 2. MRCP. Lymphadenopathy portocaval, gastro-hepatic ligament mass and pancreatic bed likely responsible for extrinsic compression and encasement of the common bile duct.

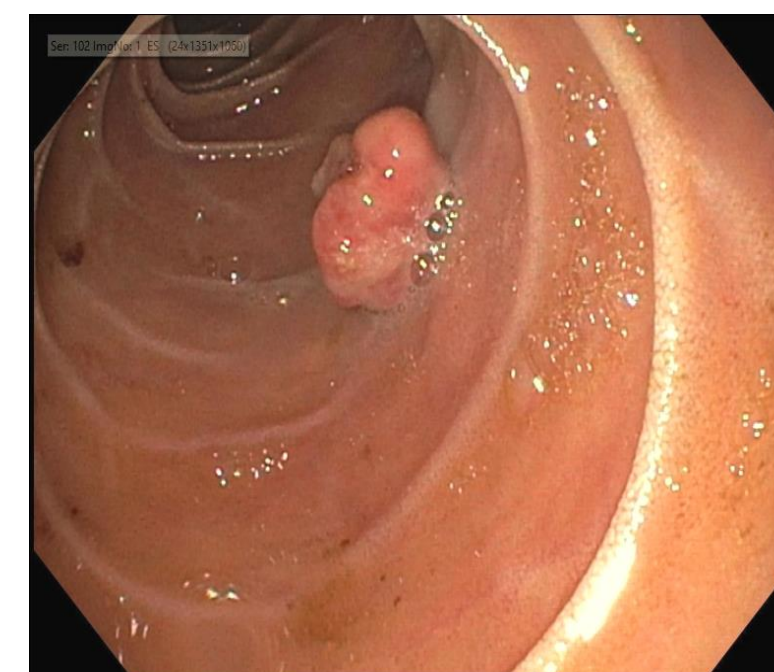


Figure 3 EGD; Pedunculated polyp in Duodenum.

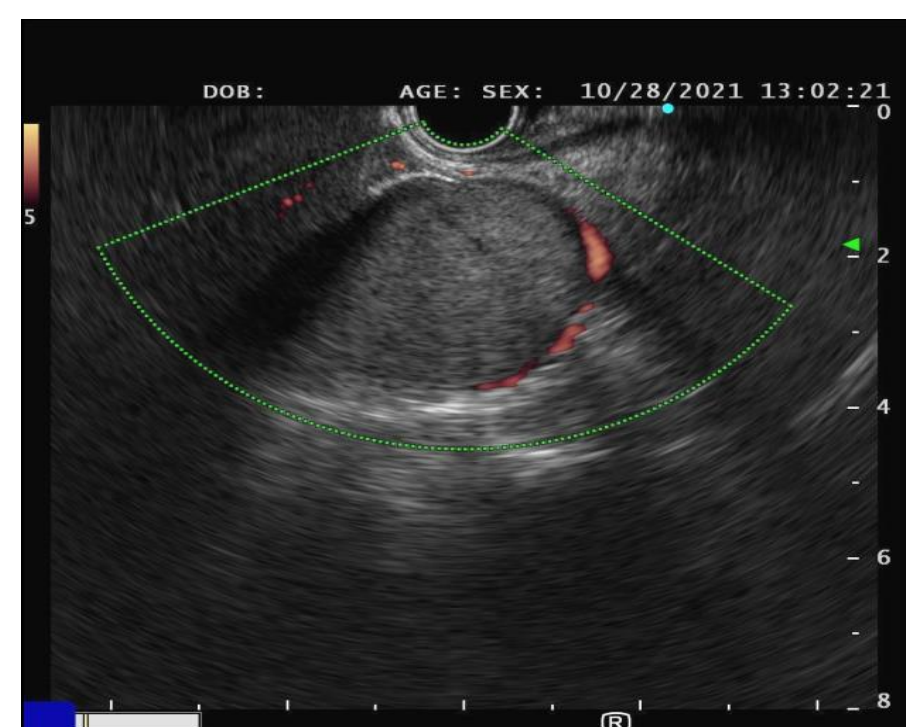


Figure 5. EUS; lobulated homogenous, vascular and slightly hyperechoic round mass at the gastro-hepatic ligament.



Figure 6. EUS with FNA of gastro-hepatic ligament mass.



Figure 7. ERCP. Wall Flex™ 10 mm x 60 mm fully covered metallic stent was placed.

Discussion

RCC is the most common primary renal tumor. Up to 25% of cases present with advanced disease at the time of diagnosis. Our patient presents with multiple intraabdominal masses causing biliary tree and pancreatic duct obstruction resulting in jaundice and pruritus. Advanced Endoscopic techniques have become critical in treating diseases of the GI tract. This case illustrates how these techniques can work both as a diagnostic tool and in management. In our institution, these invasive procedures are commonly used on elderly population with extensive comorbidities that may not be candidates for surgery or more invasive procedures. Our patient opted for comfort care for which ERCP with stent placement done for palliative purposes.

Pancreatic involvement by non-renal malignancies may indicate an advanced systemic disease. Metastatic renal cell carcinoma to the pancreas can present as an isolated event and is, thus amenable to surgical resection, which is associated with long-term survival. Accurate diagnosis of pancreatic involvement by metastatic renal cell carcinoma on histology is paramount, especially given that renal cell carcinoma metastasis may manifest more than a decade after its initial presentation like our patient.²

Conclusions

Advanced endoscopic techniques and cross-sectional images play an essential role in the diagnosis and management of pancreaticobiliary pathologies, including those from distant etiologies such as renal cell carcinoma, which may mimic pancreaticobiliary malignancies. As these techniques continue to advance, we will have more options to manage complex pathologies of the GI tract while using less invasive procedures like the ones presented in this case.

References

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