

Introduction

Pancreatic cancers are diagnosed in advanced stages and by that time the treatment options are often limited. We report a rare case, showing metastatic pancreatic acinar cell carcinoma (PACC) in the liver without any evidence of primary lesion in the pancreas based on imaging studies.

Case Description

A 78-year-old male with a past medical history of prostate cancer, pancreatic insufficiency due to recurrent pancreatitis and irritable bowel syndrome was seen in gastroenterology clinic for epigastric pain. Patient's family history was significant for prostate cancer and social history was pertinent for alcohol abuse in the past. He underwent endoscopic evaluation with EGD and colonoscopy, both of which were unremarkable. Thereafter, MRI abdomen with contrast revealed a 6 cm right hepatic lobe lesion concerning for malignancy along with multiple cysts approximately 15 mm in size, and no other lesion was identified in the abdomen. Lab work was also unremarkable (see Table-1). Subsequently he underwent IR guided liver biopsy of the mass. The final histopathological diagnosis of the biopsy was acinar cell carcinoma of pancreatic origin and likely metastatic lesion. Looking back at the MRI abdomen there were no findings to suggest of pancreatic lesion, consequently he underwent EUS which showed normal esophagus, stomach and duodenum, the pancreatic parenchyma was consistent with fatty infiltration however no cyst, pseudocyst or mass was identified through the entire pancreas. At this point, patient already followed with medical oncology and was started on systemic pancreatic regimen therapy. He tolerated chemotherapy well and repeat CT scans in subsequent months showed overall stable disease.

Discussion

Hepatologists routinely come across liver lesions suspicious for malignancy. Liver is the second most common site of metastasis after lymphatic system. Pancreatic acinar cell carcinomas (PACC) are rare, accounting for 1-2% of adult pancreatic tumors. On MRI, PACC appear as large, oval mass with moderate and heterogenous enhancement after intravenous contrast. Our case is one of its kind due to the detection of significantly sized pancreatic acinar cell tumor in the liver prior to it being detectable in the pancreas itself (see Figure-1 for imaging details). This case highlights the importance of prompt diagnosis and management especially in challenging cases which present with discordance between histopathological and imaging studies.

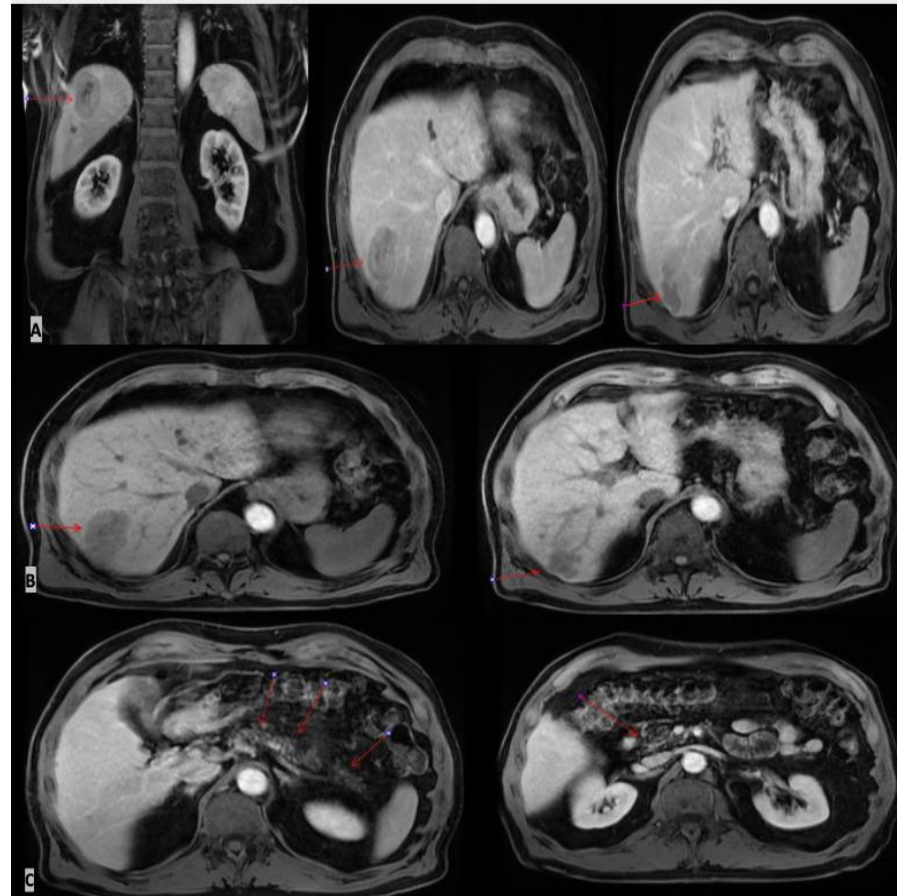


Figure-1: A: Post-contrast T1-weighted MRI; images showing predominantly peripheral enhancement of segment 6/7 hepatic lesion (red arrows). B: Pre-contrast T1-weighted MRI; images showing predominantly peripheral enhancement of segment 6/7 hepatic lesion (red arrows). C: Post-contrast T1-weighted MRI; Left image marks pancreatic body and tail, Right image marks the uncinata/head, does not show any lesion and is completely normal.

Lab Values/Reference Range & Units	Patient Result
WBC 4.50-13.50 K/uL	7.06
Hemoglobin 13.0-16.0 g/dL	13.8
Platelets 150-450 K/uL	231
Albumin 3.2-4.7 g/dL	3.3
INR 0.8-1.2	1.1
Total Bilirubin 0.1-1.0 mg/dL	0.9
Alkaline Phosphatase 89-365 U/L	98
AST 10-40 U/L	22
ALT 10-44 U/L	15
Cancer Antigen 19-9 0.0-40.0 U/MI	13.3
CEA 0.0-5.0 ng/mL	1.7
AFP 0.0-8.4 ng/mL	<2.0
PSA, Screening 0.00-4.00 ng/mL	<0.01

Table 1: Diagnostic Lab work up

References

1. Paley, M.R. and P.R. Ros, *HEPATIC METASTASES*. Radiologic Clinics of North America, 1998. **36**(2): p. 349-363.
2. Al-Hader, A., et al., *Pancreatic acinar cell carcinoma: A review on molecular profiling of patient tumors*. World J Gastroenterol, 2017. **23**(45): p. 7945-7951.
3. Jornet, D., et al., *MR imaging features of pancreatic acinar cell carcinoma*. Diagn Interv Imaging, 2019. **100**(7-8): p. 427-435.