

PANCREATIC ACINAR CELL CARCINOMA WITH SYNCHRONOUS LIVER METASTASIS: FOUR-YEAR SURVIVAL AFTER AGGRESSIVE MULTIMODAL THERAPY



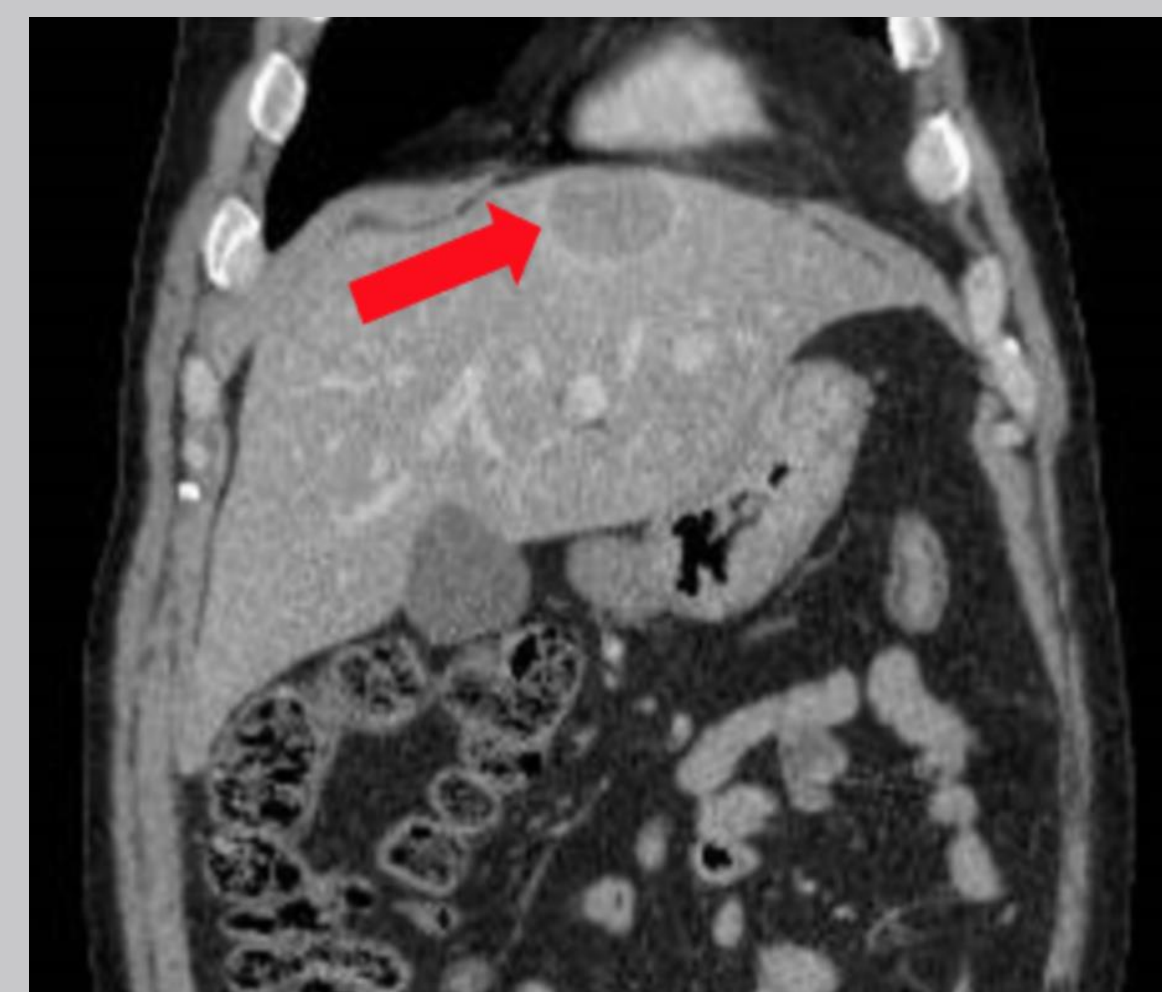
Kyung Yoon, MD; Rachel Stern, MD; Kirill Antonov, MD; Vincent Kaykaty, DO; Basem Azab, MD

INTRODUCTION

- Pancreatic Acinar Cell Carcinoma (ACC) is a rare neoplasm (< 2%) with a biology distinct from ductal adenocarcinoma (PDAC).
- Often demonstrates slower progression and better response to multimodality therapy.
- This case highlights the potential for prolonged survival in metastatic ACC with aggressive management.

CASE PRESENTATION

- Patient: 57-year-old man presenting with epigastric pain.
- Imaging: CT revealed a 3 cm pancreatic head mass with a synchronous 3.6 cm liver lesion.
- Initial Biopsy (EUS): misdiagnosed as a neuroendocrine neoplasm.
- Final Pathology: metastatic pancreatic acinar cell carcinoma.



AGGRESSIVE MULTINODAL MANAGEMENT & 4-YEAR TIMELINE

- **Surgery:**
 - Patient underwent pancreaticoduodenectomy (Whipple) & hepatic segmentectomy (II/IV).
- **Adjuvant Therapy & Complication:**
 - Postoperative chemotherapy was initiated.
 - Complicated by acute kidney injury, progressing to end-stage renal disease requiring hemodialysis.
- **Precision Oncology:**
 - Genetic testing revealed a germline BRCA2 mutation.
 - Therapy was transitioned to a PARP inhibitor (Olaparib).
- **Surveillance & Outcome (> 4 Years):**
 - Patient remained disease-free on serial PET/CT scans.
 - Maintained good functional status despite ongoing dialysis.
 - Final Outcome: the patient passed away from a myocardial infarction, unrelated to his cancer, after more than four years of survival.

CONCLUSION

- Aggressive surgical intervention should be considered for well-selected patients with metastatic pancreatic ACC.
- This case challenges the traditional nihilism associated with stage IV pancreatic cancer, emphasizing the ACC is not PDAC.
- A multidisciplinary approach integrating surgery with precision oncology can yield unexpectedly favorable, long-term outcomes.

DISCUSSION

- Surgical resection of both primary ACC and synchronous liver metastases can lead to durable, long-term survival in select patients.
- Multimodal therapy, including targeted PARP inhibition for BRCA-mutated tumors, is highly effective for disease control.
- Prolonged, high-quality survival is achievable even in the face of severe, treatment-related comorbidities like dialysis dependence.

REFERENCES

1. Hartwig W, et al. Acinar cell carcinoma of the pancreas: is resection justified even in limited metastatic disease? *Am J Surg*. 2011;202(1):23-7.
2. Lowery MA, et al. Acinar cell carcinoma of the pancreas: new genetic and treatment insights into a rare malignancy. *Oncologist*. 2011;16(12):1714-20.
3. Calimano-Ramirez LF, et al. Pancreatic acinar cell carcinoma: A comprehensive review. *World J Gastroenterol*. 2022;28(40):5827-44.