

# The Great Imitator: A Case of Pseudocirrhosis in Metastatic Breast Cancer

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## INTRODUCTION

Pseudocirrhosis (PC) is the radiographic appearance of cirrhosis without corresponding histologic findings, usually in patients with metastatic cancer. We present a case of PC in a patient with metastatic breast cancer, which mimicked decompensated cirrhosis.

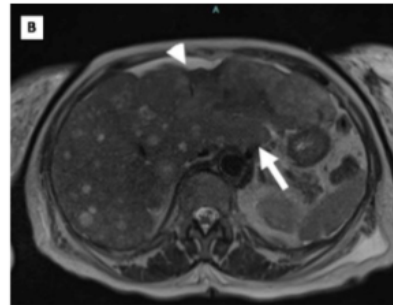
## CASE DESCRIPTION

- 69-year-old female with stage IV ER+ breast cancer with metastatic disease to the liver and spine presented to the ED for intermittent RUQ pain with associated nausea and decreased oral intake for one week.
- No history of cirrhosis and no risk factors for the development of cirrhosis.
- Lab work on presentation is shown in Table 1.
- CT/MRCP showed numerous liver lesions consistent with known metastatic disease, which had decreased in size as compared to the previous study and perihepatic ascites but was negative for biliary pathology.
- PC was suspected because of nodular liver contour, asymmetric enlargement of the left and caudate lobes, and prominent fissures. Imaging one year prior did not demonstrate evidence of cirrhosis (Figure 1). Given worsening liver enzymes, bilirubin, and thrombocytopenia, we suspected the patient had PC on top of underlying intrahepatic cholestasis from liver metastasis.
- A non-targeted liver biopsy was obtained, which showed poorly differentiated adenocarcinoma of the breast with surrounding normal liver parenchyma without any evidence of cirrhosis or advanced fibrosis.

## IMAGES



A. CT one year prior to presentation demonstrating interval improvement in liver lesions with no evidence of cirrhosis



B. Axial T2 image demonstrating extensive hepatic metastases, a nodular liver contour (arrowhead) and caudate lobe hypertrophy (arrow), findings consistent with pseudocirrhosis

## DISCUSSION

- PC is a radiological diagnosis in which the morphological changes of the liver closely mimic cirrhosis; without the typical histopathological changes seen on biopsy.
- It most commonly occurs in patients with metastatic breast cancer, although it has also been reported in other malignancies.
- Portal hypertension is often seen in patients with PC.
- The prevalence of PC in patients with metastatic breast cancer is thought to be up to 50%.
- The pathophysiology leading to the formation of PC is not clearly understood.
- In chemotherapy-naive patients, it has been associated with a desmoplastic reaction. In patients who received chemotherapy, it has been attributed to tumor necrosis, development of nodular regenerative hyperplasia, or sinusoidal obstruction syndrome.
- Identifying this condition early on is crucial as it carries the same complications and clinical progression as cirrhosis. Further studies are required to help us understand this entity better.

Table 1: Lab Results at Presentation

AST (U/L)	280
ALT (U/L)	98
Total Bilirubin (mg/dL)	18.6
Direct Bilirubin (mg/dL)	14.6
INR	1.3
Platelets (/uL)	190
Albumin (g/dL)	3.0
Creatinine (mg/dL)	2.15