Complete Response in a Case of Hormone-Positive, HER2-Negative Breast Cancer Presenting with Visceral Crisis

Sir,

Breast cancer (BC) is metastatic at diagnosis in 3-8% of cases, with metastases developing in approximately 40% of early-stage cases during follow-up.[1] CDK4/6 inhibitors represent the first-line treatment for metastatic hormone receptor-positive, HER2-negative BC without visceral crisis, whereas chemotherapy remains the standard approach in cases presenting with a visceral organ crisis.[2,3]

A 52-year woman presented with a progressively enlarging mass in the left breast. Tru-cut biopsy confirmed invasive lobular carcinoma characterised by oestrogen receptor (ER) positivity (90%), progesterone receptor (PR) negativity, HER2 negativity by fluorescence *in situ* hybridisation (FISH), and a Ki-67 proliferation index of 25%. PET-CT demonstrated a 107 × 43 mm malignant mass in the left breast, metastatic axillary lymphadenopathy, widespread hepatic and osseous metastases, and massive ascites (Figure 1). Her Eastern Cooperative Oncology Group (ECOG) performance status was 3. Laboratory findings revealed severe hepatobiliary dysfunction with elevated bilirubin (9.5 mg/dL), lactate dehydrogenase (LDH) (604 U/L), tumour markers CA 15-3 (1552 U/mL), and CEA (24 µg/L).

Due to the visceral crisis, the patient initially received weekly cisplatin at a dose of 40 mg/m^2 for three consecutive doses. Following an improvement in bilirubin levels, cisplatin was administered at 75 mg/m^2 every 21 days for two additional cycles, completing a total of three cycles of chemotherapy. After three cycles of chemotherapy, CT imaging demonstrated a partial response, with bilirubin levels reduced to 2.8 mg/dL. Subsequently, treatment was transitioned to ribociclib (600 mg/day), letrozole (2.5 mg/day), goserelin (3.6 mg/month), and denosumab (120 mg/month). Palliative radiotherapy was also initiated. Ribociclib was subsequently reduced to 400 mg/day due to grade 3 neutropenia and thrombocytopenia.

At the one-year follow-up, PET-CT imaging demonstrated a complete radiological response in the breast mass, axillary lymph nodes, and liver metastases. Laboratory findings were normalised for bilirubin, alanine aminotransferase (ALT), aspartate aminotransferase (AST), and LDH, while alkaline phosphatase (ALP), tumour markers CA 15-3 (279 U/mL), and CEA (5.9 µg/L) showed improvement but remained elevated. The patient continued treatment with ribociclib, letrozole, goserelin, and denosumab, experiencing manageable grade 1-2 neutropenia and anaemia.

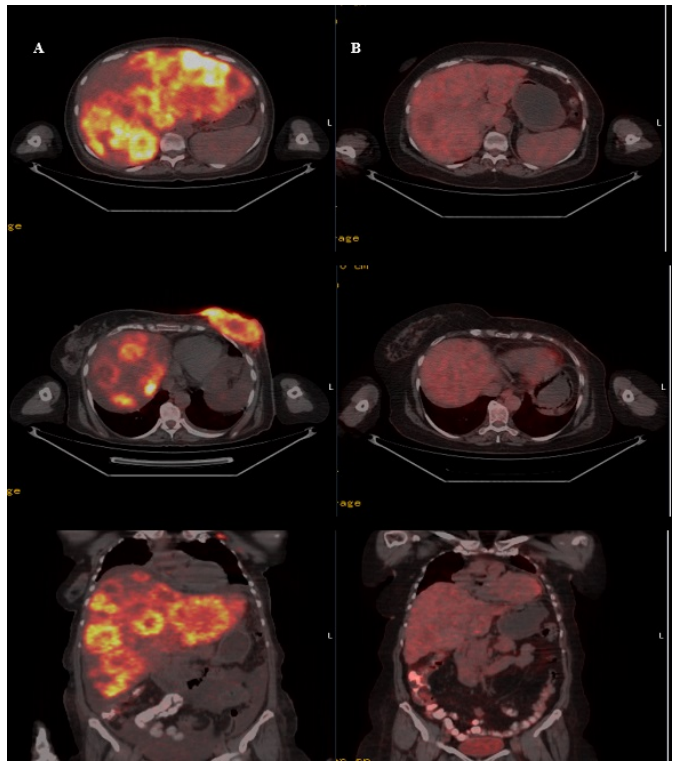

Figure 1: PET-CT images at baseline (A) and after 1 year of treatment (B), demonstrating treatment response in liver metastases (axial view, first panel), the primary breast tumour (axial view, second panel), and liver metastases (coronal view, third panel).

In metastatic BC presenting with visceral crisis, chemotherapy remains critical for initial management. However, transitioning to CDK4/6 inhibitors and endocrine therapy following clinical and laboratory improvement may optimise outcomes.

COMPETING INTEREST:
The authors declared no conflict of interest.

AUTHORS' CONTRIBUTION:
GO, AFA: Contributions to manuscript design, study coordination, data collection, and analysis.
TIA: Acquisition and interpretation of data.
GO, TIA: Supervision or mentorship.
All authors approved the final version of the manuscript to be published.

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Received: January 18, 2025; Revised: April 27, 2025; Accepted: May 16, 2025
DOI: https://doi.org/10.29271/jcpsp.2025.09.1219