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Multidisciplinary Management of Fungating Locally Advanced and Metastatic Breast Cancer: Report of Two Cases

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Rezumat

Managementul multidisciplinar al cancerului mamar fungant local-avansat și metastatic: prezentarea a două cazuri

Context/Obiective: Managementul terapeutic al cancerului mamar este într-o continuă evoluție, conducând la îmbunătățirea ratelor de vindecare şi supraviețuire. Cu toate acestea, în pofida acestor progrese, managementul cancerului mamar fungant a rămas în mare parte neschimbat, fiind frecvent considerat o afecțiune care necesită tratament paliativ, mai degrabă decât o abordare cu potențial curativ. În plus, cancerele mamare fungante metastatice şi local avansate, în special la pacientele tinere, rămân dificil de tratat din cauza lipsei unor recomandări terapeutice clare în ghidurile internaționale (NCCN, ESMO), în timp ce datele publicate pe această temă sunt limitate. Prezentăm două cazuri clinice de cancer mamar fungant local avansat şi metastatic, tratate prin strategii multidisciplinare individualizate. Aceste cazuri ilustrează complexitatea procesului decizional terapeutic în astfel de situații şi evidențiază rolul unui management multidisciplinar adaptativ.
Metode: Primul caz a fost reprezentat de o pacientă în vârstă de 38 de ani, diagnosticată cu carcinom ductal invaziv triplu negativ, stadiul IV, complicat cu sepsis, anemie severă şi tromboză a venei subclavii stângi. Tratamentul sistemic inițial, radioterapia, antibioterapia şi corectarea anemiei au permis obținerea temporară a controlului local şi sistemic al bolii. Ulterior, necroza tumorală şi reapariția sepsisului au impus efectuarea unei mastectomii paliative („toilet mastectomy"). Al doilea caz a fost reprezentat de o pacientă în vârstă de 58 de ani, diagnosticată cu carcinom ductal invaziv Luminal B, local avansat, complicat cu infecție şi hemoragie, care a refuzat tratamentul sistemic neoadjuvant şi a fost supusă ulterior unei mastectomii radicale modificate, cu reconstrucția defectului peretelui toracic prin grefă de piele liberă despicată, urmată de tratament oncologic sistemic.
Rezultate: Aceste cazuri ilustrează rolul potențial al individualizării secvenței terapeutice în funcție de evoluția bolii şi de starea pacientei. Cazul 1 a demonstrat că un management multidisciplinar complex, incluzând chimioterapie sistemică, radioterapia metastazelor cerebrale şi controlul chirurgical al complicațiilor locale,

poate permite obținerea unui control susținut al bolii la paciente atent selecționate cu cancer mamar triplu negativ. Cazul 2 a demonstrat că, la pacientele care refuză tratamentul neoadjuvant, rezecția chirurgicală asociată tehnicilor reconstructive poate asigura controlul local, urmat de un management sistemic eficient al bolii metastatice apărute ulterior.
Concluzii: Rezultatele noastre sugerează că elaborarea unui plan terapeutic personalizat, monitorizarea atentă de către o echipă multidisciplinară şi reevaluarea continuă a strategiei terapeutice în funcție de noile provocări clinice reprezintă elemente importante în managementul cancerului mamar fungant local avansat. Aceste observații trebuie considerate exemple generatoare de ipoteze privind îngrijirea multidisciplinară adaptativă şi nu dovezi care să susțină recomandări terapeutice generalizabile. Sunt necesare studii viitoare pentru o mai bună definire a strategiilor optime de management al cancerului mamar fungant metastatic.

Cuvinte cheie: cancer mamar avansat, echipă multidisciplinară, hemoragie, infecție

Abstract

Background/Objectives: The therapeutic management of breast cancer is continuously evolving, leading to improved cure and survival rates. However, despite these advances, the management of fungating breast cancer has remained largely unchanged and is frequently regarded as a condition requiring palliative treatment rather than a potentially curative approach. Furthermore, metastatic and locally advanced fungating breast cancers, particularly in younger patients, remain challenging to manage due to the lack of clear therapeutic recommendations in international guidelines (NCCN, ESMO), while published reports on this topic are scarce. This report presents two clinical cases of locally advanced, metastatic fungating breast cancer managed through individualized multidisciplinary strategies. The cases illustrate the complexity of therapeutic decision-making in these challenging scenarios and highlight the role of adaptive, multidisciplinary management.
Methods: The first case involved a 38-year-old woman diagnosed with stage IV triple-negative invasive ductal carcinoma complicated by sepsis, severe anemia, and left subclavian vein thrombosis. Initial systemic therapy, radiotherapy, antibiotic treatment, and correction of anemia achieved temporary local and systemic disease control. However, subsequent tumor necrosis and recurrent sepsis necessitated palliative (toilet) mastectomy. The second case involved a 58-year-old woman diagnosed with locally advanced Luminal B invasive ductal carcinoma complicated by infection and bleeding, who refused neoadjuvant systemic treatment and subsequently underwent modified radical mastectomy with reconstruction of the chest wall defect using a split-thickness skin graft, followed by systemic oncological treatment.
Results: These cases illustrate the potential role of individualized treatment sequencing adapted to disease evolution and patient condition. Case 1 demonstrated that aggressive multidisciplinary management, including systemic chemotherapy, radiotherapy for brain metastases, and surgical control of local complications may achieve sustained disease control in carefully selected triple-negative patients. Case 2 demonstrated that in patients refusing neoadjuvant treatment, surgical resection with reconstructive techniques may achieve local control, followed by effective systemic management of subsequent metastatic disease.
Conclusions: Our findings suggest that a personalized treatment plan, close monitoring by a multidisciplinary tumor board, and continuous reassessment of the therapeutic strategy in response to newly emerging clinical challenges are key elements in the management of locally advanced fungating breast cancer. These observations should be regarded as hypothesis-generating examples of adaptive multidisciplinary care rather than evidence supporting generalized therapeutic recommendations. Future studies are needed to better define optimal management strategies for fungating metastatic breast cancer.

Keywords: advanced breast cancer, multidisciplinary team, hemorrhage, infection

Introduction

Over the past decades, breast cancer has benefited from remarkable advances in the understanding of the biological mechanisms involved in carcinogenesis and tumor progression. The development of genomic sequencing technologies, the characterization of molecular subtypes, the study of the tumor microenvironment and microbiome, as well as the implementation of modern screening and early diagnostic strategies, have profoundly transformed the management of this disease (1,2). In parallel, the introduction of targeted therapies, immunotherapy, and refinements in surgical and reconstructive techniques have significantly improved patient survival and quality of life. Consequently, breast

cancer is currently one of the most extensively investigated malignancies worldwide (3,4).

Despite these advances, fungating breast cancer remains an insufficiently studied clinical entity (5-7). Although major therapeutic progress has been achieved in breast oncology, fungating tumors are rarely evaluated as a distinct subgroup in clinical studies and are only marginally addressed in international guidelines (3,4). Furthermore, particularly when associated with metastatic disease, these cases are frequently regarded as having a poor prognosis, with treatment goals often limited to palliation, although selected patients may benefit from complex multimodal therapeutic strategies aimed at achieving long-term disease control (8-11).

Fungating breast cancer represents a severe clinical manifestation of locally advanced breast cancer and, occasionally, metastatic disease. It is characterized by tumor infiltration and destruction of the overlying skin, resulting in extensive ulceration, cutaneous necrosis, exudate, malodor, and, in some cases, infection or hemorrhage (10,11). These complications may transform an oncological condition into a true medical and surgical emergency, requiring rapid and individualized therapeutic decision-making.

In this context, we present two cases of fungating breast cancer that underscore the importance of individualized multidisciplinary management and the need to adapt therapeutic strategies according to disease evolution, local complications, and patient preferences.

Case Reports

We report two female patients aged 38 and 58 years, respectively, diagnosed with fungating locally advanced breast cancer, one of whom presented with metastatic disease at diagnosis. Both patients originated from rural areas and had only primary education. Therapeutic management was individualized through multidisciplinary evaluation and continuous reassessment of the treatment strategy according to disease evolution, local complications, and patient preferences.

The first patient (Case 1) was premenopausal, aged 38, and presented to the emergency room in November 2023 with fever, chills, generalized physical asthenia, persistent left breast pain, and an ulcerated and infected tumor at this level (*Fig. 1A*). The patient had no family history of breast or ovarian cancer, and her personal, medical and surgical history was unremarkable. Local clinical examination highlighted an enlarged, erythematous, edematous left breast, with a large, ulcerated tumor infiltrating the entire breast, of hard consistency, multiple nodules penetrating the surface, with necrotic zones, yellow-green secretions, and spontaneous local bleeding.

Biological examination highlighted a hemoglobin (Hb) level of 9 g/dL, 18000 per mm^3 leukocytes. Initial imaging tests showed the presence of extensive lymph node involvement with maximum dimensions of 38/45/46 mm, with no other sites of distant spread. A contrast CT examination revealed left subclavian vein thrombosis; skeletal scintigraphy showed no signs of bone metastases and the brain magnetic resonance imaging (MRI) exam showed the presence of multiple secondary brain lesions with maximum dimensions of 14.5/12.7/16.5 mm with perilesional edema (*Fig. 1B*).

Histopathology (HP) and immunohistochemistry (IHC) exams from the biopsy obtained from the tumor fragment were suggestive for invasive ductal carcinoma G3 with ER-, PR -, HER2 -, PD-L1 -, Ki 67: 35%. The final diagnosis showed a patient with advanced breast neoplasia, specifically T4bN3cM1 (BRA,LYM) - stage IV disease triple negative,

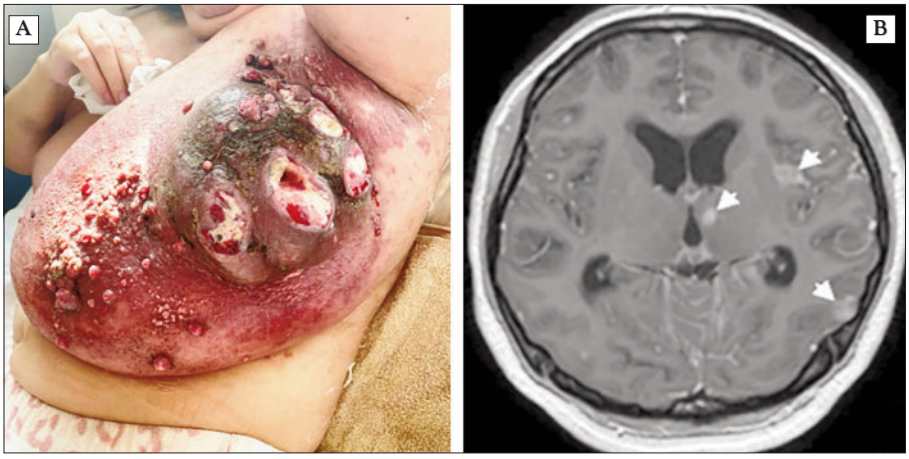

Figure 1. **(A)** Advanced infected and hemorrhagic left breast cancer, **(B)** Brain MRI exam finds secondary brain determinations (white arrow) with perilesional edema.

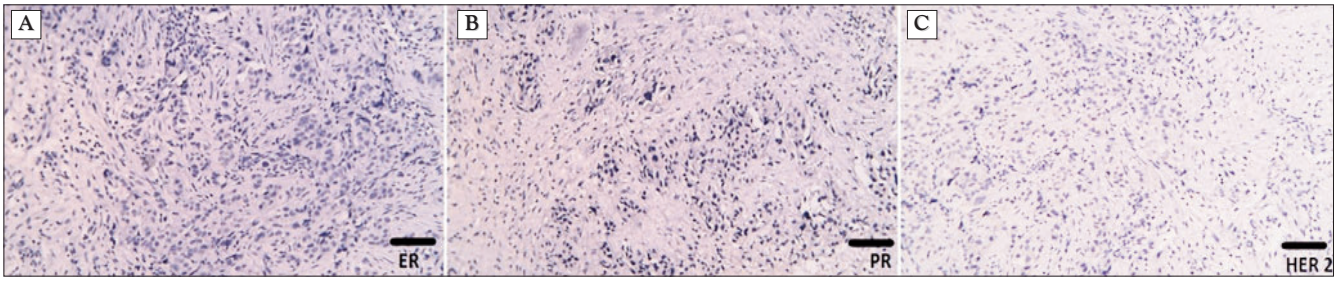

Figure 2. **(A, B, C)** Negative immunoreaction of (a) Estrogen (ER), (b) Progesterone (PR) and (c) HER 2 markers in invasive ductal breast cancer (Magnification = 20X and scale bar = 50 µm for all images).

complicated by infection and anemia (*Fig. 2 A, B, C*).

Considering the age and aspect of the neoplasia, it was decided to control the local bleeding through compressive dressing and control the infection with initial empirical antibiotic therapy (association of cephalosporin and metronidazole), then targeted (meropenem) after the bacteriological result. The decision of the multidisciplinary board was to initiate oncological therapy as the first therapeutic step, in an oncology clinic but under surgical supervision.

Given the patient's age, aggressive triple-negative phenotype, and extensive metastatic disease with multiple brain metastases, immediate systemic oncologic therapy was prioritized, with surgical supervision, as per institutional multidisciplinary tumor board decision.

Systemic Chemotherapy: Docetaxel 85 mg/m² + Carboplatin (AUC 5-6) every 21 days was initiated .This regimen reflected the aggressive triple-negative phenotype, PD-L1-negative status, high disease burden, and the need for rapid systemic disease control. Germline BRCA1/2 and PALB2 testing was not available at presentation due to institutional limitations and was subsequently recommended. Six cycles were administered with clinical re-evaluation every month and imaging re-evaluation every 3 months.

Brain Metastases Treatment: Due to the patient's high-risk classification (≥3 brain lesions at diagnosis), the multidisciplinary board elected palliative whole-brain radiation therapy (WBRT) 30 Gy/10 fractions to the entire brain volume, with concurrent boost to metastatic lesions to a total dose of 40 Gy (4 Gy/fraction × 10 fractions). This approach addressed the immediate threat of intracranial disease while allowing concurrent systemic therapy. WBRT was chosen over stereotactic radiosurgery (SRS) given the multiplicity and distribution of lesions. Local radiotherapy to the primary breast was deferred pending response to systemic therapy.

After 6 cycles of chemotherapy and completion of brain radiotherapy (March 2024), imaging showed: marked regression of brain metastases (7.6×6.3×5.5 mm), clinical reduction in breast tumor volume, absence of palpable axillary lymph nodes, and resolution of subclavian vein thrombosis (*Fig. 3C* and *Fig.4*).

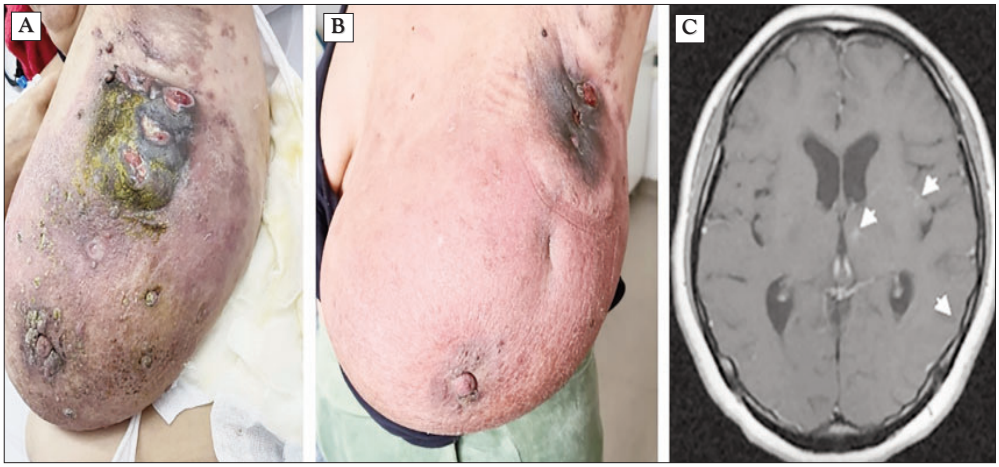

Figure 3. **(A)** Aspect of the breast 2 months after initiating oncological therapy and **(B)** at 4 months; **(C)** MRI examination at 4 months from diagnosis shows the regressive aspect of the secondary cerebral metastases (compared to **Fig. 1 B**).

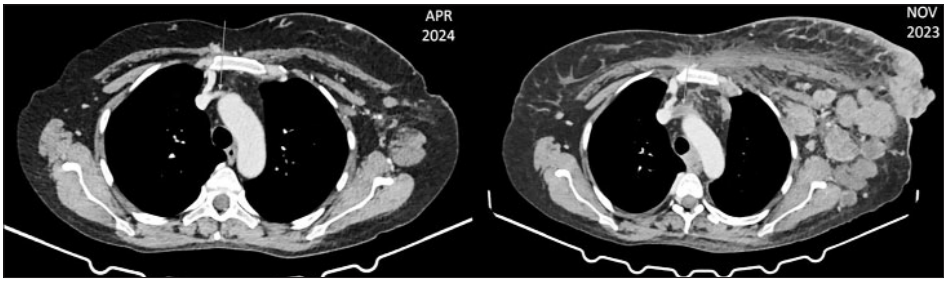

Figure 4. CT Examination: Favorable aspect of the left subclavian vein thrombosis at a 5-month interval.

In evolution (June 2024), the breast tumor was complicated by cutaneous necrosis and reinfection of the breast, which is why emergency surgery was performed, carrying out a toilet mastectomy, with negative margins (*Fig. 5*). Histopathological examination confirmed complete negative resection margins (R0 resection). The objective of this procedure was dual: (1) urgent control of life-threatening sepsis and tissue necrosis, and (2) achievement of adequate local oncologic control. The aspect of the post-operative scar at three months after surgery was normal, without local signs of recurrence. Subsequently, the patient continued chemotherapy treatment with Epirubicin + Cyclophosphamide, and external irradiation was planned at the level of the chest wall and left axilla. The patient's latest imaging monitoring showed no signs of local or distant evolution, and the cerebral lesions remained dimensionally stable. Given the success of the surgical intervention and the control of cerebral metastases through local treatment and systemic therapy, we considered it opportune to irradiate the chest wall and regional lymph node areas. The patient underwent loco-regional external radiotherapy via Intensity-Modulated Radiation Therapy (IMRT) technique on the target volume of the chest wall and regional lymphatic areas up to a total dose of 50 Gy – 2 Gy/ fraction X 25 fractions, with daily image-guided radiation therapy (IGRT) using Cone Beam Computed Tomography (CBCT) imaging validation.

Post-surgical Systemic Therapy: Following six cycles of docetaxel plus carboplatin and subsequent surgical control of the local complication, systemic therapy was continued with epirubicin plus cyclophosphamide, introducing an anthracycline-based, non-cross-resistant chemotherapy backbone with established activity in triple-negative breast cancer. This sequential approach was selected in the context of the aggressive tumor biology and high disease burden, with the aim of maintaining systemic disease control. Subsequently, loco-regional radiotherapy was delivered via Intensity-Modulated Radiation Therapy (IMRT) to the chest wall and regional lymph node areas (50 Gy, 2 Gy/fraction × 25 fractions) using daily image-guided radiotherapy.

At the latest follow-up (September 2025), the patient showed sustained disease control, with no signs of local progression and stable metastatic lesions.

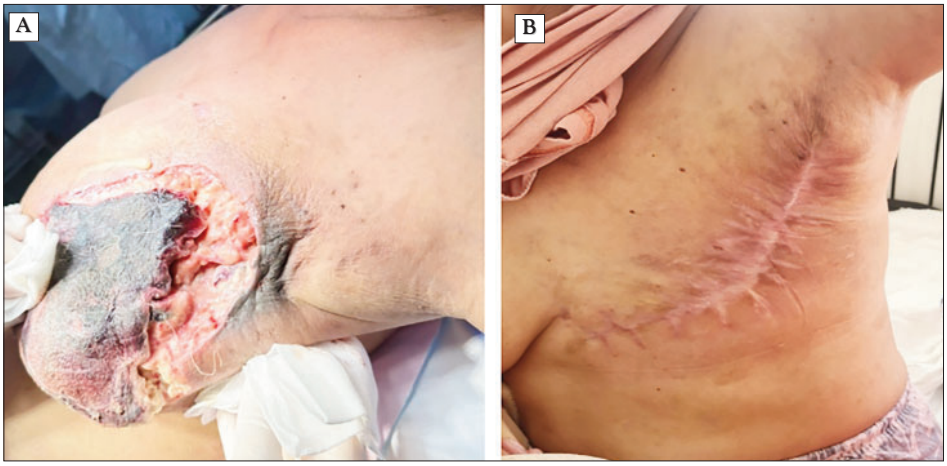

Figure 5. **(A)** Cutaneous necrosis of the left breast (aspect of the breast in July 2024); **(B)** spect of the post-toilet mastectomy scar (September 2024).

The second case we present is of a 58-year-old woman with no significant personal history, who was evaluated in the oncology clinic in February 2022 for chills, pain, and the appearance of a tumoral formation at the level of the left mammary gland. Local clinical examination showed a large tumoral mass of approximately 8/6 cm in the upper inner quadrant (UIQ) of the left breast, presenting with exulceration, fetid secretions and areas of active bleeding. It was adherent to deep planes, with adjacent permeation nodules. Additionally, we observed a left axillary lymph node block, hard and adherent to deep planes (*Fig. 6*). Biological examination showed a Hb level of 8.5 g/dl and 17800/mm^3 leukocytes.

Mammography (February 2022) found a tumor with highly suggestive features of malignancy at the level of the left breast. A CT examination of the thorax, abdomen, and pelvis performed at the same time showed a mass with tissue densities approximately 64/38 mm in the upper inner quadrant of the left breast, tangent to the pectoralis major muscle, with erasure of the cleavage plane, and lymph node masses in the left axilla with a maximum diameter of 25 mm, without other changes.

We performed core needle biopsy followed by a HP exam, showing signs of infiltrative breast carcinoma, invasive ductal type, moderately differentiated. The IHC exam revealed ER + 75%, PGR + 60%, HER2 1+, Ki67 + 40% - Luminal B (neoplasm of the left mammary gland upper inner quadrant - invasive ductal carcinoma subtype luminal B, cT4bN2M0-stage III B).

Based on the clinical and imaging findings, the disease was staged as cT4bN2M0, stage IIIB. Although inflammatory breast cancer was initially considered because of the extensive skin involvement, the patient did not meet the clinical criteria for cT4d disease, as diffuse erythema involving more than one-third of the breast, peau d'orange, and rapid inflammatory progression were absent. Final pathological examination confirmed pT4b disease, with skin ulceration and necrosis, involvement of 5 of 16 axillary lymph nodes (pN2a), and multifocal disease, supporting the classification as locally advanced non-inflammatory breast cancer.

The multidisciplinary tumor board recommended neoadjuvant chemotherapy (4 cycles anthracycline-based + 4 cycles taxane (4FC + 4TAX)) followed by surgery and adjuvant radiotherapy. However, the patient explicitly refused systemic chemotherapy. Given her refusal, and after assessment confirming technical resectability, the team proceeded with primary surgical resection in April 2022: modified radical (Madden-type) left mastectomy with en bloc

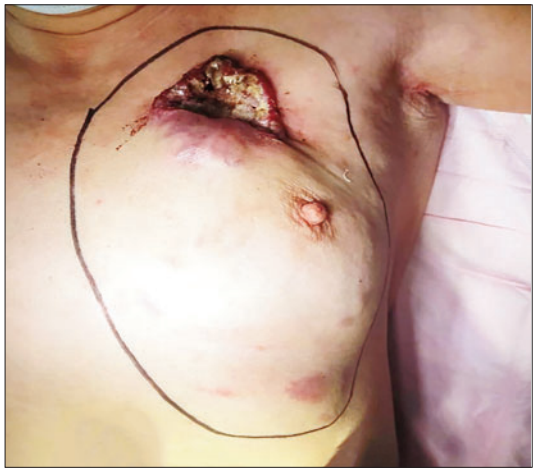

Figure 6. Fungating left breast cancer.

removal of skin containing permeation nodules, followed by left axillary lymphadenectomy. The resulting skin defect was covered with split-thickness free skin graft from the thigh (*Fig. 7 A,B,C*).

Pathological examination: Invasive ductal carcinoma, poorly differentiated (G3), multifocal (three tumor foci: T1 > 2 cm, T2 0.5 cm, T3 1.1×0.5 cm). pT4b (skin involvement with ulceration/necrosis), pN2a (5/16 lymph nodes involved, 3 with extranodal extension). Resection margins: negative (R0). Postoperative IHC: HER2-negative (score 0), ER 40%, PR 80%, Ki-67 40%. Tumor markers: CA 15-3: 39.23 U/mL, CEA: 7.66 ng/mL.

Postoperatively, adjuvant chemotherapy was proposed, as the patient refused any other medication. CT imaging re-evaluation at two months post-op showed post-mastectomy status with left lymphadenectomy without signs of loco-regional recurrence but with the appearance of secondary hepatic determinations with maximum diameter of 12/9.5 mm, pulmonary metastases with a maximum diameter of 10.5/7.7 mm, right axillary lymph nodes with diameters up to 27/10 mm and mediastinal lymph nodes with diameters of up to 10.4/6.5 mm.

The appearance of metastases 2 months after primary surgery raised important diagnostic and interpretive considerations: these findings are consistent with occult micrometastatic disease present at the time of initial diagnosis, rather than disease dissemination caused by the surgical intervention. Indeed, the patient's initial clinical presentation - advanced locoregional disease with high Ki-67 proliferation and multifocal tumors - is consistent with a biologically aggressive disease that likely harbored subclinical distant metastases at presentation. Careful review of staging imaging performed before surgery

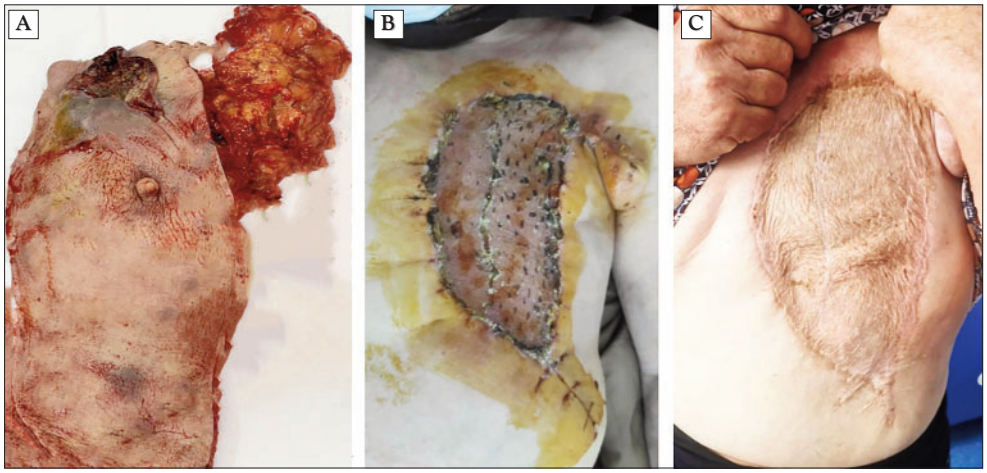

Figure 7. **(A)** Operative specimen - Madden-type modified radical mastectomy en bloc with the skin containing permeation nodules and axillary lymph node blocks; **(B)** aspect of the postoperative wound at one month after covering the skin defect with split-thickness free skin; **(C)** aspect of the scar at one year.

did not reveal these sites, but the sensitivity of conventional CT for small nodal and pulmonary lesions is limited.

The final diagnosis was that of a neoplasm of the left mammary gland upper-inner quadrant invasive ductal carcinoma subtype luminal B cT4bN2M0- stage III B (April 2022) – on which a radical left mastectomy Madden type + was performed at pT4bN2aM0-stage IIIB, in evolution (July 2022) through M1 pul, hep, lym. In the multidisciplinary board, it was decided to initiate palliative treatment with CDK 4/6 inhibitors Palbociclib 125 mg/day for 21 days, followed by a 7-days break + hormone therapy with Letrozole followed by monthly clinical-biological re-evaluation and imaging re-evaluation at three months.

CT imaging monitoring of the response to treatment (November 2022) showed post-mastectomy status with left axillary lymphadenectomy without signs of loco-regional recurrence, secondary hepatic lesions with a maximum diameter of 7/5 mm (decreasing), secondary pulmonary lesions with a maximum diameter of 6.2/6 mm (decreasing), right axillary lymph nodes with diameters of up to 14/5 mm. According to RECIST 1.1 criteria, this represented partial response. Tumor markers: CA15-3= 24.3 U/ml and CEA = 2.62 ng/ml, also decreasing. Tomographic imaging monitoring of response to treatment (February and September 2023, February and June 2024) showed pulmonary parenchyma with minimal fibrotic changes, subpleural, and liver with homogeneous parenchyma, without localized intrahepatic processes. At the CT assessment in February 2023, the previously identified hepatic, pulmonary, and lymph node metastatic lesions were no longer detectable, consistent with a complete response (CR) according to RECIST 1.1. The CR was confirmed and maintained on subsequent imaging assessments in September 2023, February 2024, and June 2024 (*Fig. 8*). To date (September 2025), the patient maintained complete response (CR) under first-line oncological treatment, with good tolerance and an ECOG performance status of 0, and a progression-free interval of 38 months.

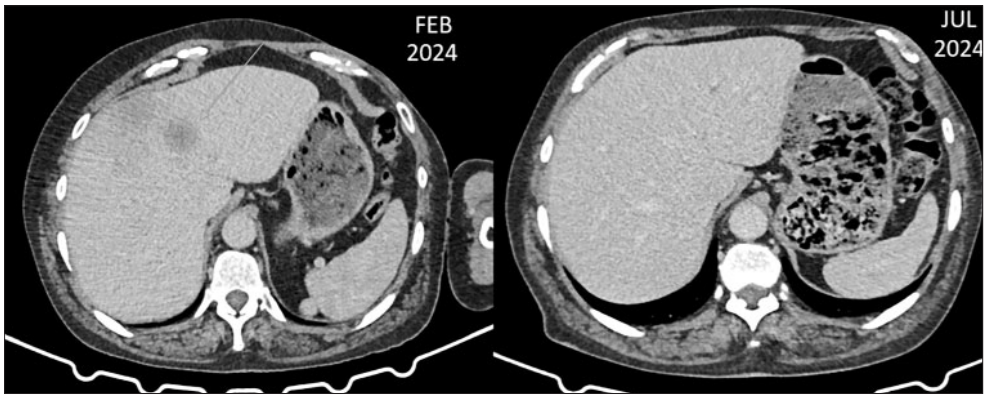

Figure 8. CT Examination: Regressive aspect of hepatic metastases at periodic evaluation.

Discussion

Fungating metastatic breast cancer represents an aggressive form of breast malignancy that requires a multidisciplinary approach and the dynamic integration of systemic oncologic therapies with local treatments (radiotherapy, interventional radiology, or surgery) in order to achieve local disease control (7,8, 10,12,13). While early-stage breast cancer can often be managed with surgery and less extensive therapies, fungating forms of locally advanced breast cancer (LABC) and metastatic disease pose significant challenges because of tumor size, malodor, invasive behavior, potential treatment resistance, and hemorrhagic or infectious complications (10,14).

Current practice considers neoadjuvant chemotherapy as a primary approach for fungating locally advanced breast cancer, even when complicated by controlled hemorrhage or infection. The primary objectives are tumor downsizing, stabilization or reduction of metastatic disease, and achievement of local control. However, the selection of specific regimens should be individualized based on tumor subtype, molecular characteristics, and patient factors (5,9,10,11,12).

Triple-negative breast cancer (TNBC), as illustrated in Case 1, represents an aggressive subtype with limited targeted options. The benefit of platinum-containing combinations in TNBC is established, though absolute survival benefit remains modest. For hormone receptor-positive disease, as in Case 2, CDK4/6 inhibitor + endocrine therapy represents the current standard of care with superior efficacy and tolerability compared to chemotherapy alone. The duration of response in Case 2 (38 months progression-free survival) is consistent with published data on CDK4/6 inhibitor efficacy in advanced hormone receptor-positive breast cancer (15).

Regarding conservative treatment strategies, current practice is evolving with the incorporation of novel interventional radiology techniques, including transcatheter arterial embolization (TAE), used in hemorrhagic tumors complicated by hemorrhagic shock as a bridge to oncologic or surgical treatment; transcatheter arterial chemoembolization with drug-eluting beads (DEB-TACE); and transcatheter arterial chemoinfusion (TACI), both performed after histologic confirmation of diagnosis (16-19). In the reported cases, none of these interventional techniques were used because the necessary facilities and equipment were unavailable.

In the setting of fungating breast cancer, radiotherapy extends beyond its exclusively oncologic role and becomes an essential tool for controlling local complications and optimizing patients' clinical status. Its ability to reduce bleeding, pain, and tumor burden makes it an important therapeutic option, particularly when surgery is not feasible or must be postponed.

Emergency surgical intervention continues to play an important but selective role in fungating breast cancer. It is clearly indicated for the management of refractory, life-threatening complications, such as uncontrolled hemorrhage or necrotizing infection (15). Its role in elective surgery for disease control in metastatic patients remains controversial and should be individualized. As described in other hemorrhagic oncologic conditions involving gastric or pancreatic malignancies, emergency surgery should be preceded by patient stabilization. In advanced or metastatic disease, emergency surgery should primarily be considered a means of achieving rapid control of life-threatening local complications and symptom relief, rather than a potentially curative intervention (20,21,23,24).

Regarding primary surgery in de novo stage IV breast cancer: several randomized trials (including MF07-01 and similar studies) have examined whether addition of primary tumor resection to systemic therapy improves overall survival compared to systemic therapy alone (23) . Results have shown that while primary tumor resection may improve loco-regional control, it does not consistently demonstrate an overall survival benefit in unselected stage IV populations. However, these trials enrolled heterogeneous patients, and it remains possible that carefully selected subsets - such as patients with limited metastatic disease, good performance status, and potentially resectable disease - may benefit.

Case 2 illustrates the complexity of treatment individualization in this setting: a patient who refused neoadjuvant therapy underwent primary resection with curative intent (R0 resection achieved), followed by effective systemic management of subsequently detected metastases. Whether surgery in this setting contributed to the excellent long-term outcome is impossible to determine definitively from a single case. Cuniolo et al. proposed a similar approach in selected cases, occasionally including indications for Halsted radical mastectomy (22), although such decisions must be made within a multidisciplinary tumor board.

Critical considerations for any surgery in advanced disease include: (1) achieving R0/R1 resection when possible, as R2 resections carry high recurrence risk; (2) patient stabilization prior to emergency surgery; (3) multidisciplinary assessment of resectability and patient suitability; and (4) recognition that the primary benefit may be symptomatic control and quality of life rather than survival benefit. In locally advanced cases requiring mastectomy, involvement of

plastic surgery for coverage of cutaneous defects is essential. Split-thickness skin grafts (Case 2) provide reliable coverage and reduce complications compared to leaving defects to granulate. This reduces infection risk and hospital stay in these already-compromised patients.

The indications for axillary lymph node dissection in fungating metastatic LABC are limited (23,24). In Case 2, axillary dissection was performed because the nodal masses formed a single conglomerate with the primary tumor and remained resectable, with a clear dissection plane separating them from the major axillary structures.

Both cases highlight that rigid treatment algorithms cannot be applied at the time of initial diagnosis for fungating metastatic disease. Continuous reassessment and adaptation of the treatment plan according to disease response, emergence of new complications, and patient tolerance is essential. The multidisciplinary tumor board plays a crucial role in these adaptive decisions. Treatment goals may shift from curative intent to symptom control and back again as disease evolution unfolds.

Limitations

This is a report of two cases, not a comparative series or randomized trial. The observations cannot demonstrate efficacy of any therapeutic strategy or establish causal relationships between interventions and outcomes. The two cases differ substantially in molecular subtype (triple-negative vs. Luminal B), stage at presentation (stage IV vs. stage III), response patterns (chemotherapy-responsive vs. endocrine-responsive), and treatment adherence. This heterogeneity limits any comparison or generalization. Both patients were managed at a single institution with multidisciplinary infrastructure. Generalization to settings with limited resources, different patient populations, or different institutional capabilities is not appropriate.

Determining which specific interventions contributed to clinical outcomes is impossible in complex multidisciplinary management. The excellent long-term outcomes observed may reflect patient biology (intrinsic chemosensitivity or endocrine sensitivity), treatment efficacy, or combinations thereof. Both cases represent patients with favorable long-term outcomes. Cases with less favorable progression or treatment failure are not represented, potentially skewing the impression of treatment effectiveness. These cases cannot serve as evidence that similar outcomes would be expected in other patients with fungating metastatic breast cancer, particularly across different biogeographic or socioeconomic contexts.

Conclusions

The management of fungating, metastatic, and complicated locally advanced breast cancer remains a challenge for which no single therapeutic pathway exists. Individualized multidisciplinary management, with continuous reassessment of therapeutic strategy in response to emerging clinical challenges and disease evolution, represents a reasonable approach for selected patients.

However, these observations should be viewed as hypothesis-generating examples of adaptive multidisciplinary care rather than evidence supporting broad therapeutic recommendations. Effective control of acute complications (hemorrhage, infection, necrosis), integration of appropriate systemic and local treatments within a multidisciplinary framework, and regular re-evaluation may enable meaningful disease control and improved quality of life in selected cases.

Future prospective and retrospective cohort studies with larger patient numbers are needed to better define optimal management strategies for fungating, metastatic, and complicated forms of locally advanced breast cancer. Until such evidence is available, individualization of care within a multidisciplinary team setting remains appropriate, with careful consideration of patient preferences, disease biology, performance status, and realistic outcome expectations.

Conflicts of Interest

The authors declare no conflicts of interest

Ethical Statements

Institutional Review Board Statement: This case series was conducted in accordance with the Declaration of Helsinki and approved by the institutional ethics committee.

Informed Consent Statement

Both patients provided written informed consent for the publication of their clinical information and photographs. The patients understand that their names will not be published and that measures will be taken to protect their anonymity.

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