

CASE REPORT

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# Bilateral locally advanced metastatic breast cancer at presentation: More work needs to be done!

Karim Anis, Sherif Monib

## ABSTRACT

**Introduction:** Breast cancer is considered the most common female cancer. As breast cancer incidence is well known to increase with age, screening programs in most countries stop inviting patients beyond the age of 70 years. Locally advanced breast cancer (LABC) is a clinical challenge with poor outcome as the majority of patients either have metastatic disease at presentation or develop distant metastases despite all the efforts and resources geared for early detection of breast cancer and appropriate therapy.

**Case Report:** We are presenting a rare case of a bilateral, locally advanced, metastatic breast cancer at presentation.

**Conclusion:** Locally advanced metastatic breast cancer at presentation should be identified and treated promptly to reach a favorable outcome.

**Keywords:** Breast cancer, Locally advanced breast cancer, Metastatic breast cancer

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## INTRODUCTION

Breast cancer (BC) is the second most common cancer in both males and females after lung cancer, accounting for 25% of all cancers. It is the most common cancer in females, and is considered one of the leading causes of death in females. Its incidence, mortality, and survival rates vary considerably among different parts of the world, but generally on the rise [1].

Locally advanced breast cancer (LABC) includes tumors larger than 50 mm in size, skin involvement, invasion of underlying muscles, and chest wall or axillary lymph nodes disease. It represents 4.6% of all female breast cancers; despite modern treatment modalities, prognosis of patients with LABC is still unfavorable, with 5-year survival rates less than 50% [2].

About 6% of females are found to have metastatic disease at presentation [3]. Unfortunately, there is not much literature about bilateral locally advanced metastatic breast cancer at presentation. What makes our case report unique was that our patient had synchronous bilateral, locally advanced, metastatic breast cancer at first presentation.

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## CASE REPORT

We are presenting a case of a 73-year-old woman who presented to outpatient dermatology department with chest wall and breast skin changes which is getting worse over the last few months.

Her past medical history included chronic eczema, type 2 diabetes mellitus, and hypertension. General examination was unremarkable, and breast examination revealed bilateral locally advanced breast lesions, with palpable bilateral axillary lymph nodes as well as multiple skin nodules over the chest wall (Figures 1 and 2).

Laboratory investigations revealed low hemoglobin 87 g/L, raised white cell count  $14 \times 10^9/L$ , normal liver

functions, chest X-ray revealed multiple lung metastases, bilateral multiple skin punch biopsies revealed metastatic invasive ductal carcinoma grade III with positive hormone receptors and negative HER2; staging computed tomography (CT) scans showed lung and liver metastasis.

Because of the locally advanced metastatic disease, she was started on endocrine treatment (aromatase inhibitors) and referred to the palliative team to start early palliative treatment, but she sadly passed away a few months later.

Our patient was most probably misled with her past medical history of chronic eczema, as she initially thought that her symptoms were part of her eczema but she sought medical advice as skin manifestation has been progressive despite of her usual topical treatments.



Figure 1: Front view showing bilateral locally advanced breast cancer.



Figure 2: Lateral view showing bilateral locally advanced breast cancer.

## DISCUSSION

Locally advanced breast cancer refers to the most advanced stage of breast cancer, which involves large tumor size, nearby structure involvement as well as nodal disease. Despite advances in breast cancer screening, diagnosis, and treatment; breast cancer management at this stage remains a clinical challenge as most patients with locally advanced disease will experience disease relapse and eventual death [4].

There are no consistent, evidence-based guidelines for managing breast cancer, and treatment decisions are often made based on tumor size, type, grade, hormone receptor status, HER2 status, lymphovascular invasion, presence or absence of metastatic disease [5].

Although most authors report a worse prognosis for patients with bilateral breast cancer compared to unilateral breast cancer patients [6]; a few studies that did not support these findings, Kheirleiseid et al. in 2011 concluded that synchronous tumors were associated with lower survival when compared to metachronous tumors [7].

Also, Kadioğlu et al. found that five-year survival rates and recurrence rates were not statistically different among three groups of multifocal, unilateral multicentric, and bilateral synchronous tumors [8].

It is well accepted that locally advanced metastatic breast cancer is not curable, yet possible treatment options are still available. Early introduction of palliative care management parallel to active treatment is crucial to improve symptoms and quality of life [9].

There was no consensus on management and outcome of bilateral locally advanced metastatic breast cancer at presentation till the Arbeitsgemeinschaft Gynäkologische Onkologie (German Gynecological Oncology Group, AGO) presented their recommendations for the diagnosis and treatment of patients with locally advanced and metastatic breast cancer in 2019 [10].

More work needs to be done in reporting these patients' presentation, management and the outcome, to come up with robust data to improve patients' outcomes.

## CONCLUSION

Clinicians looking after chronic eczema patients should have a high index of suspicion as it might hide other underlying conditions. Patients with locally advanced disease require multidisciplinary team input to optimize their care, while patients with bilateral locally advanced metastatic breast cancer at presentation need reporting to come up with the best management pathway to reach a favorable outcome. Also, locally advanced metastatic breast cancer at presentation should be identified and actively treated promptly, and also referred to start concurrent palliative treatment to reach a favorable outcome.

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## Author Contributions

Karim Anis – Conception of the work, Acquisition of data, Revising the work critically for important intellectual content, Final approval of the version to be published, Agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved

Sherif Monib – Design of the work, Drafting the work, Final approval of the version to be published, Agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved

## Guarantor of Submission

The corresponding author is the guarantor of submission.

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## Consent Statement

Written informed consent was obtained from the patient for publication of this article.

## Conflict of Interest

Authors declare no conflict of interest.

## Data Availability

All relevant data are within the paper and its Supporting Information files.

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