

A series of fungating female breast cancers presented during the pandemic

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Introduction

Breast cancer is the most common malignancy among women worldwide and in Sri Lanka, accounting for one fourth of all female malignancies [1, 2]. About 10% of all female breast cancer (FBC)s show locally advanced disease at diagnosis [1, 3]. FBC screening and public awareness programs have played a pivotal role in identifying the disease at an early stage. Despite having a state driven free health care delivery system, Sri Lanka lacks a formal cancer screening program.

A fungating breast cancer is a type of locally advanced FBC where the lesion breaches the skin to present with an ulcer. Nowadays, such locally advanced cancer is rare even in the developing world. Such delayed and advanced disease presentation invariably affect the overall prognosis negatively [3]. Over the last two years, the covid-19 pandemic overburdened health care delivery systems worldwide. This has resulted in delays and deficiencies in elective surgical patient care and such issues appear to be worse in low-middle income countries. In such background, we present a series of fungating breast cancers encountered at a rural District General Hospital in Sri Lanka in 2021.

Case Presentation

Case 1

A 61-year-old woman, with a history of Bronchial Asthma presented with a large ulcerating breast lump for nine months in January 2021. There was no family history of breast cancer. Examination showed a large ulcerating tumour mass comprising the entire left breast fixed to the pectoral muscles with a separate axillary lymph node mass (Figure 1A). Ultrasonography was in line with the clinical diagnosis of a locally advanced breast carcinoma and needle biopsy histology confirmed an invasive breast carcinoma-No Special Type (IBC-NST) – Nottingham Grade - II. Axillary mass was confirmed malignant on cytology. There was no systemic metastasis identified on Computed Tomography (CT)

although the mass had invaded the pectoral muscles. The patient completed two cycles of neo-adjuvant chemotherapy. Unfortunately, she acquired Covid-19 and succumbed due to pneumonia in March 2021.

Case 2

A 46-year-old woman, bed bound with a left hemiplegia for 3 years following an ischaemic stroke was brought to the hospital for a sacral pressure sore in late January 2021. She had poor family and social support. On examination, in addition to the infected deep pressure sore over the sacrum, she was found to have an ulcerating cancer nearly destructing the inner half of the left breast (Figure 1B) with a left pleural effusion causing respiratory embarrassment. Breast lesion edge biopsy was confirmed to be an IBC-NST – Nottingham Grade - II. A sample of the therapeutic aspirate of the pleural effusion was positive for malignant cells. Upon the patient wish, she was palliated with wound management for both breast cancer and the pressure sore. She succumbed to death four weeks after the diagnosis.

Case 3

In mid-February 2021, a previously healthy 68-year-old woman presented to the surgical emergency with an ulcerated tumour mass in the upper inner quadrant of the right breast. She had noted the mass for more than a year and ulceration for about two months. Fear of the pandemic was stated as the main reason for the delayed presentation in addition to fear of stigmatization. She had a 12 × 10 cm tumour mass in the right breast, fixed to the chest wall with central necrotic ulceration (Figure 1C). The lesion was crossing the midline to invade the left breast. There was palpable axillary lymphadenopathy. Tumour edge biopsy confirmed an IBC-NST – Nottingham Grade - I and the axillary nodes were cytologically positive for malignant cells. CT imaging of the chest confirmed ipsilateral lung metastasis and local invasion of the tumour in to the rib cage. The patient received palliative chemotherapy and local radiotherapy with wound care. She was alive at five months from the presentation with slow progression of local disease.

Case 4

A 47-year-old woman in remission of bipolar affective

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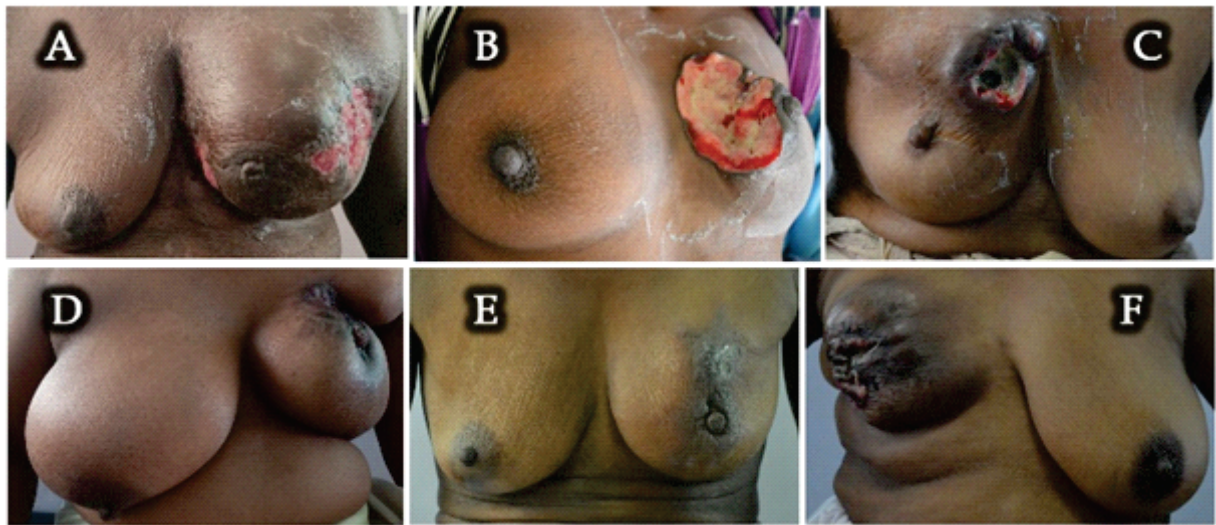


Figure 1. Locally advanced ulcerated female breast cancers at initial presentation

disorder presented with an ulcerating mass disfiguring her left breast for a year and a half (Figure 1D) in April 2021. Due to lack of social support and pandemic fear the patient avoided a medical review. Clinical and Ultrasonographic evaluation suggested a locally advanced breast cancer with axillary adenopathy. CT scan of the chest and abdomen excluded metastasis. Edge biopsy proved it to be a Lobular Breast Carcinoma(LBC) – Nottingham Grade – II. As the patient did not tolerate beyond two cycles of neo-adjuvant chemotherapy she was subjected to mastectomy and axillary clearance. Histology confirmed a ypT4cN2a LBC. She is currently receiving chest wall radiotherapy.

Case 5

A 53-year-old post-menopausal female presented with a 10 × 8 cm left breast mass with surface ulceration (Figure 1E) in June 2021. She noted the mass for more than a year but waited without medical attention till it got ulcerated as she was reluctant to visit for medical help due to pandemic fear. Examination revealed left axillary adenopathy. Both ultrasonography and mammography confirmed the clinical suspicion of a locally advanced breast cancer. Biopsy confirmed the lesion to be IBC-NST (Nottingham grade II). CT chest and abdomen excluded metastasis. The patient received neoadjuvant chemotherapy followed by mastectomy and axillary clearance which confirmed ypT4aN1a IBS-NST on final histology. Currently, she is on hormonal therapy following chest wall radiotherapy.

Case 6

A 47-year-old woman presented with an ulcerating mass infested with maggots, near-completely destructing her right breast (Figure 1F) in August 2021. She felt the mass almost a year ago which grew progressively and later got ulcerated.

Attributing to the pandemic the patient avoided seeking medical attention and had 'treatment' from a traditional healer with local herbal paste application. At the presentation she was febrile and had clinical and biochemical features of sepsis. She underwent initial wound debridement, biopsy and antibiotic treatment. Ultrasonographically the axilla was negative. CT scan of the chest and abdomen did not reveal evidence of metastasis. Biopsy confirmed an IBS-NST (Nottingham Grade-II). Subsequently, the patient underwent mastectomy and axillary clearance with a Latissimus dorsi flap cover after neoadjuvant therapy. She had ypT4bN1a IBS-NST, received radiotherapy and is on hormonal therapy. The patient is well nine months after initial diagnosis.

Discussion

Due to early detection and higher efficacy of combined treatment modalities, global female breast cancer mortality is on decline [1]. Contrary to that, Sri Lankan numbers, both incidence and mortality are on the rise with a relatively higher percentage of disease being initially presented as advanced cancer [4]. A recent Sri Lankan study has shown poor socio-economic status of the family, weak health literacy and lack of knowledge on breast cancer to be associated with presentation delays in female breast cancer patients in Sri Lanka [5]. To worsen the setting, the Covid-19 pandemic has disrupted elective medical services locally and globally during the last eighteen months. Prolonged lock downs, patient fear to reach health care facilities and disease stigmatization have led to progression of diseases including FBC with advanced and complicated clinical presentations [6].

Prognosis of breast cancer depends on disease staging at presentation and tumour biology. Systemically or locally advanced initial disease bear poor outcome [3]. Fungating

breast cancer has been a rarity over the last few decades due to screening programs and public education. It has almost become a disease of the past. However, in the background where the pandemic has disturbed both elective surgical services and community public health services in Sri Lanka, we have encountered an exponential emergence of advanced breast cancers including fungating lesions at a rural District General Hospital. This may well be a common concern in low-middle income countries and other nations significantly affected by the pandemic. There has been another recent report on emergence of extremely advanced breast cancers in Italy, a country which was badly hit by the pandemic [7]. Thus, with the trend of re-emerging locally and systemically advanced female breast cancers during and after the Covid-19 pandemic, especially when the country is in an economical bankruptcy, it is important for the clinicians to be prepared to treat this 'disease of the past' and the policy makers to be broad-minded to cater the 'new' needs in advanced breast cancer. Further, identification of a series of locally advanced FBCs at a single institution within a short period highlights the need to further study the reasons for patient presentation delays in FBC in Sri Lanka and the necessity to guide our 'symptomatic' breast cancer patients to seek medical attention early.

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Learning Points:

- Contrary to global figures, female breast cancer incidence and mortality in Sri Lanka still show a rising trend.
- Locally advanced female breast cancers are not uncommon in Sri Lankan rural or low-income family settings, especially after the pandemic.
- A Multi-disciplinary approach would be essential to provide patient-centered curative intent or palliative intent treatment in these cases.