

ABSTRACT

BACKGROUND

Locally advanced breast cancer (LABC) occurs relatively infrequently and poses a significant clinical challenge. Even with combined-modality therapy and the use of novel drugs, long-term disease-free survival is approximately 50%-70%⁸⁸, indicating that the optimal therapeutic approach for these patients has not yet been reached. Neoadjuvant systemic therapy integrated into a multimodality program is the established treatment in LABC. Pathological response to neoadjuvant chemotherapy directly correlates with disease free survival and hence this study was undertaken.

AIM

- To assess the pathological response of neoadjuvant chemotherapy in locally advanced breast carcinoma.

MATERIALS AND METHODS

STUDY CENTRE: Institute of General Surgery , Madras Medical College and Rajiv Gandhi Government General Hospital , Chennai

DURATION OF STUDY: May 2017- September 2018

STUDY DESIGN: Observational study

SAMPLE SIZE: 30

INCLUSION CRITERIA:

- Age > 18 years
- Locally advanced carcinoma
- Willing for follow up

EXCLUSION CRITERIA

- Prior Breast Surgery
- Prior radiotherapy to breast

- Metastatic disease

ETHICS CLEARANCE: Yes

METHODOLOGY

- Patients aged >18 years presenting with malignant breast lump were evaluated.
- Diagnosis confirmed by core needle biopsy and grade and hormonal status assessed and metastatic work up done.
- Thirty patients who fulfilled the inclusion criteria were chosen and were sent for neoadjuvant chemotherapy.(FAC OR FAC+PACLITAXEL REGIMEN)
- Patients were followed up and response of tumor assessed clinically and modified radical mastectomy was done.
- Specimen was analyzed for pathological response and observations made.

RESULTS

Majority of the population belonged to the age group of 50-60 (33%). Of the 30 patients having locally advanced carcinoma 73% belonged to stage stage IIIA and

27% belonged to stage IIIB. Almost half of the patients were ER positive, PR positive and HER2 negative and 23% of the patients were triple positive. Triple negative and HER 2 positive patients were of equal distribution (17%). Percentage of ER and PR positive tumors were 67% each. Percentage of HER2 positive tumors were 40%. Postoperative assessment of specimen was done and pathological response graded according to Chevalier classification.

- 53% were of grade 4
- 30% were of grade 3
- 13% were of grade 2
- 3% was of grade 1

Only 17% of patient population showed pathological response to NACT 83% were non responders which could possibly be explained due to higher ER positivity and lower response.

CONCLUSION

Identifying which tumors are most likely to respond to specific agents and regimens could significantly improve prognosis. Clinical management of LABC could be modified based on advances in our knowledge of cancer biology and genomic profiling to a highly effective individualized approach

Keywords: LABC, neoadjuvant chemotherapy, pathological response