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Study Of Clinical Profile Of Patients With Carcinoma Breast Undergoing Modified Radical Mastectomy.

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ABSTRACT

Breast cancer is the commonest cancer among women worldwide. In 2020, 2.3 million women were diagnosed with breast cancer and 685 000 deaths were reported globally. This was an observational study (Retrospective Descriptive Cross-sectional Study). Patient data will be collected from all patients attending RMC General Surgery OPD casualty willing to get admitted and inpatient department, irrespective of their age (in adults)/gender/background/socio-economic status who underwent surgery and were willing to participate in the study. The patients were evaluated and followed up according to pre-decided protocol. In present study 46.67% cases had lump size between to 3 to 4 cm, 30% cases had lump size more than 4 cm and 20% cases had lump size less than or equal to 3 cm. The largest lump was 5 cm X 4 cm and the smallest lump was 2cm X 1cm with a mean size of 3.1X3.06cm. As our study only included cases upto stage T2N1M0, lumps larger than 5cm were not included in our study. As a conclusion invasive ductal carcinoma was the most common histological type breast cancer.

Keywords: Breast carcinoma , Radical mastectomy , breast lump

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INTRODUCTION

Breast cancer is the commonest cancer among women worldwide. In 2020, 2.3 million women were diagnosed with breast cancer and 685 000 deaths were reported globally [1]. As of the end of 2020, there were 7.8 million women alive who were diagnosed with breast cancer in the past 5 years, making it the world's most prevalent cancer. In recent years, breast cancer has emerged as the commonest malignancy affecting women in most Asian countries [2]. The breast cancer cause-specific mortality in most Asian countries is also higher as compared to western countries. Larger proportions of breast cancer patients in developing Asian countries are younger than patients in developed Asian and western countries [3]. The management of patients with early-stage breast cancer has evolved over time, with the understanding that tumor biology, and not just disease burden, impact local control. Local control is greatly improved with systemic treatments, providing an opportunity to decrease the morbidity in women with invasive breast cancer [4-6].

METHODOLOGY

This was an observational study (Retrospective Descriptive Cross-sectional Study). Patient data will be collected from all patients attending RMC General Surgery OPD casualty willing to get admitted and inpatient department, irrespective of their age (in adults)/gender/background/socio-economic status who underwent surgery and were willing to participate in the study. The patients were evaluated and followed up according to pre-decided protocol.

Inclusion Criteria

- All age groups male and female patients presenting to Pravara Rural Hospital with Carcinoma Breast of stage upto T2N1M0 or below undergoing modified radical mastectomy and willing to participate in the study.
- Confirmed breast cancer (IDC, DCIS, ILC) with indication to undergo surgery.
- Patients with IDC who have received neoadjuvant chemotherapy may participate in the study.

Exclusion Criteria

- Any surgery performed for local recurrence of carcinoma breast.
- General or local contra-indication for surgery
- Inflammatory breast cancer.
- Radiotherapy of the ipsilateral breast.
- Pregnancy or lactation.

RESULTS

43 % of the cases in our study and 56 % were post-menopausal.

Table 1: Distribution of patients according to size of the lump

Size of the lump	No of cases	Percentage (%)
< 3 cm	6	20.00
3 – 4 cm	14	46.67
> 4 cm	9	30.00
Not palpable	1	3.33
Total	30	100

In present study 46.67% cases had lump size between to 3 to 4 cm, 30% cases had lump size more than 4 cm and 20% cases had lump size less than or equal to 3 cm. The largest lump was 5 cm X 4 cm and the smallest lump was 2cm X 1cm with a mean size of 3.1X3.06cm.

As our study only included cases upto stage T2N1M0, lumps larger than 5cm were not included in our study.

Table 2: Side Distribution

Side of the lump	No. of cases	Percentage (%)
Left	9	30.00
Right	21	70.00
Total	30	100

In present study 70% cases had lump on right side and 30% cases had lump on Left side.

Table 3: Patients with clinically palpable axillary lymph node

Palpable Axillary lymph node	No of cases	Percentage (%)
Single	24	80.00
Absent	6	20.00
Total	30	100

In present study 80% cases had clinically palpable single axillary lymph node where 20% cases didn't have any clinically palpable axillary lymph node.

As only cases upto T2N1M0 were included in our study, all the patients having palpable axillary lymph nodes only had a single mobile axillary lymph node.

Table 4: Distribution of cases according to BIRADS score on Mammography

BIRADS Score	No. of cases	Percentage (%)
4A	2	6.67
4B	18	60.00
4C	10	33.33
Total	30	100

In present study after performing Mammography test 60% cases were found to be BIRADS 4B, 33.33% cases had BIRADS 4C score and 6.67% cases had BIRADS 4A score.

In present study on TNM staging 90% cases were observed having T2 stage, 10% cases had T1 stage.

As mentioned previously, cases above stage T2 were not included in our study.

DISCUSSION

The study was conducted in the department of General Surgery of the college to evaluate margins of the patients who underwent surgery for carcinoma breast upto stage T2N1M0. The study included 30 patients who satisfied the inclusion criteria from September 2016 to September 2021. In present study most of the cases were more than 40 years of age. 30% each cases were seen having age between 41 – 50 years of age and more than 60 years of age respectively. The youngest patient in our study was 29 years old and the oldest patient was 75 years old with mean age of 51.33. Majority of the patients. i.e; 56.6% were post-menopausal.

In present study maximum number of cases, i.e 46.67% cases had lump size between to 3 to 4 cm, 30% cases had lump size more than 4 cm and 20% cases had lump size less than or equal to 3 cm. Maximum lump size was 5X4 cm and minimum lump size was 2X1 cm with mean lump size of 3.1X3.06cm. The mean lump size in our study was 3.1 cm which was comparable with other studies conducted by Jing Li et al [5] and Sofi et al as demonstrated above.

In present study 80% cases had clinically palpable single axillary lymph node where 20% cases didn't have any clinically palpable axillary lymph nodes. Clinically detectable axillary lymph node metastasis at presentation is a poor prognostic sign in carcinoma breast indicating advanced disease.[6] In our study, 80% of patients were found to have clinically palpable lymph nodes at presentation which is

probably because of the lower levels of awareness of patients in a rural area that contributes to diagnosis at a more advanced stage of the disease. In the study conducted by Kohler et al [6] in Africa, the lower rate of lymph node positivity is probably less due to insufficient data. Like our study, in the study conducted by Abass et al in Sudan, 62.5 % patients had positive axillary lymph nodes. [7]

All the patients in our study had invasive ductal carcinoma proven on histopathology. The maximum proportion of patients in all comparable studies conducted by Jing Li et al [4], Zahara et al [5], Kohler et al [6] and Abass et al [7] had ductal carcinoma as demonstrated above and the findings of our study are consistent with the same.

All patients with breast cancer were assigned a clinical and a pathological stage of disease. The staging allowed for efficient identification of local treatment options, assisting in identifying systemic treatment options. The T classification of the primary tumor is the same regardless of whether it is based on clinical or pathologic criteria, or both. Size should be measured to the nearest millimeter (0.1cm). T staging was performed by clinical examination and mammography findings in our study. [8, 9]

Only cases upto T2N1M0 were included in our study, thus all had a size less than 5cm in size and at only mobile ipsilateral axillary lymph nodes. In the present study, 10% had stage T1 while the remaining 90% were in stage T2. 23 % patients had stage N0 and 77% had stage N1. All patients were clinically examined for the breast lump and axillary nodes and 14 patients had a lump size between 3 – 4cms, 9 had a lump size of more than 4 cms and 6 had a lump size less than 3 cms. One patient had a lump that was not palpable. Most of our breast cancer patients present with frequent risks including younger age, multiparity, hormonal contraceptives use, alcohol use and family history. Unfavourable prognostic indicators including late stages, large primary tumor size, skin infiltration, positive surgical margins, positive axillary lymph nodes and a high histological grade were associated.

CONCLUSION

As a conclusion invasive ductal carcinoma was the most common histological type breast cancer.

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