

Original article:

Study of demographic features of the patients of breast carcinoma

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Abstract

Introduction: The presence and extent of axillary lymph node involvement remains the most powerful predictor of recurrence and survival in a case of carcinoma breast. It has been shown that the presence of regional metastases within the axillary basin decreases a patient's 5-year survival by approximately 28-40%.

Material and methods: Present study was conducted at Acharya Vinoba Bhave Rural Hospital (AVBRH) of Jawaharlal Nehru Medical College which included patients of breast carcinoma with N0 and N1 lymph nodal status, who are treated with standard surgical procedure MRM and all the parameters required for evaluation of Nomogram were studied.

Results : Patients according to histological diagnosis were categorized in which 93 patients were of invasive ductal carcinoma of no special type and 7 patients were of special type of tumor which were Colloid, Comedo, Intracystic papillary carcinoma, invasive lobular, Lobular, Medullary and Papillary carcinoma type. Each were one.

Conclusion: Distribution of patients according to special type of tumor was done in which 93 patients out of 100 were of invasive ductal carcinoma of no special type and 7 patients were of special type tumor.

Introduction:

The presence and extent of axillary lymph node involvement remains the most powerful predictor of recurrence and survival in a case of carcinoma breast. It has been shown that the presence of regional metastases within the axillary basin decreases a patient's 5-year survival by approximately 28-40%.^{1,2} Furthermore, data derived from National Surgical Adjuvant Bowel and Breast Project Protocol B-04 shows that the likelihood of treatment failure increases as the number of metastatic axillary lymph nodes increases.³ The removal of axillary lymph nodes also improves loco-regional control, which may translate into improved overall survival for the patient.⁴⁻⁷ However, lymph node metastases are found in only 40% of patients who undergo Axillary lymph node dissection (ALND).⁸⁻⁹ The remaining patients derive no therapeutic benefit from the procedure, whereas all patients are exposed to the complications from ALND, including lymphedema, pain, stiffness, and shoulder weakness.^{10,11} Additional complications include seroma formation and vascular and brachial plexus injuries.¹²

There are different methods for detection of axillary lymph node metastasis in a case of carcinoma breast which are either by invasive or noninvasive methods. Most frequently used invasive methods in a case of early stage breast cancer for detection of axillary lymph node metastasis are Sentinel Lymph Node Biopsy(SLNB) and Axillary Sampling(AS). Noninvasive methods to detect metastasis are ultrasonography (US) with elastography of axillary

Lymph Node(LN) and ultrasonography combined with Fine Needle Aspiration Cytology(FNAC) from suspected secondaries to Lymph Node (LN).

Material and methods:

Present study was conducted at Acharya Vinoba Bhave Rural Hospital (AVBRH) of Jawaharlal Nehru Medical College which included patients of breast carcinoma with N0 and N1 lymph nodal status, who are treated with standard surgical procedure MRM and all the parameters required for evaluation of Nomogram were studied.

Type of Study: Observational study

Sample size: 100 cases

50 retrospective cases

50 prospective cases

Inclusion criteria:

Inclusion criteria for retrospective patients:

All the patients who had undergone MRM and who were investigated for all the parameters required for evaluation of nomogram who have not taken any treatment in the form chemotherapy or radiotherapy preoperatively.

Inclusion criteria for prospective cases:

All the newly diagnosed cases of carcinoma breast with N0 and N1 LN status in the axilla were included

Exclusion criteria:

1. Patients who has received neoadjuvant chemotherapy / radiotherapy
2. Recurrence cases of post MRM
3. Patients with clinically N2 and N3 lymph nodal status
4. Patients with any previous surgery on the breast on the same side

Results:

Table 1: Distribution of patients according to their age (years)

Age Group(yrs.)	No of patients	Percentage (%)
21-30	5	5
31-40	27	27
41-50	31	31
51-60	21	21
61-70	15	15
71-80	1	1
Total	100	100
Mean ± SD	48.62±11.37(24-75 yrs.)	

Table 2: Distribution of patients according to tumor confined to UIQ.

Tumor confined to UIQ	No of patients	Percentage (%)
Yes	13	13
No	87	87
Total	100	100

Table 3: Distribution of patients according to special type of tumor

Special type of tumor	No of patients	Percentage(%)
Yes	7	7
No	93	93
Total	100	100

Distribution of patients according to special type of tumor was done in which 93 patients out of 100 were of invasive ductal carcinoma of no special type and 7 patients were of special type tumor. (Table and Graph 3).

Table 4: Distribution of patients according to histological diagnosis

Histological diagnosis	No of patients	Percentage(%)
IDC	93	93
Special Type		
Colloid	1	1
Comedo	1	1
Intracystic Papillary Carcinoma	1	1
Invasive lobular	1	1
Lobular	1	1
Medullary	1	1
Papillary Carcinoma	1	1

Patients according to histological diagnosis were categorized in which 93 patients were of invasive ductal carcinoma of no special type and 7 patients were of special type of tumor which were Colloid, Comedo, Intracystic papillary carcinoma, invasive lobular, Lobular, Medullary and Papillary carcinoma type. Each were one.

Discussion:

The present study was conducted in the Department of General Surgery . In our present study a total of 100 female patients were enrolled fulfilling the inclusion criteria in which 50 patients were taken retrospectively from April 2013 to August 2015 and the rest 50 patients were taken prospectively from September 2015 till September 2017. In our study maximum number of patients (31) were in the age group of 41-50 years, the youngest patient in our study was 24 years old while the eldest was 75 years with the mean age of 48.62 ± 11.37 .

In the study conducted by Bevilacqua et al³⁸ in 2007 in New York had maximum number of patients in the age group of 41-50 year. Also, studies conducted by PF Qiu et al¹⁰³ and Xiang Bi et al¹⁰⁴ in 2012 and 2015 respectively in china also had maximum number of their patients in the age group of 41-50 year group. A study conducted by Katz et al¹⁰⁵ in 2007 at Boston also had similar reports which were comparable to our study.

Conclusion:

Distribution of patients according to special type of tumor was done in which 93 patients out of 100 were of invasive ductal carcinoma of no special type and 7 patients were of special type tumor.

References:

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