



## Original Paper

# Clinical Study of Carcinoma Breast

Authors

**Dr Anjaneya T\*, Dr Bakakrishna M Naik**

Assistant Professors, Department of General Surgery,  
M S Ramaiah Medical College, Bangalore, Karnataka, India

\*Corresponding Author

**Dr Anjaneya T**

## Abstract

**Background and Objective:** Breast cancer is the commonest cancer in the world. It ranks second only to carcinoma cervix in developing countries. Despite major advances in the past years in understanding the clinical and biological nature of disease, notwithstanding the dramatic change in the treatment, the problem continues to persist.

The objective of the study was to note the clinical presentation and various histological types as well as treatment modality in carcinoma breast.

**Materials and Methods:** This prospective clinic-pathological study, has been carried out in patients presenting with breast cancer at Sree Siddhartha medical College Hospital Between November 2007 to April 2009. A study of 30 cases was done, involving the detailed history including the age of the patients, type and duration of symptoms, family history of any breast lesions, age at menarche and menopause were taken. A thorough physical examination including the site, size, skin changes, nipple areolar changes, mobility and lymphonodal status etc were done. All female patients with breast cancer are included in the study. The investigation and interventions done on the patients with their consent. Routine blood examinations, with Chest X-ray and FNAC, and wedge biopsy were the investigations that were carried out on the patients.

**Results:** The carcinoma breast was commonly seen in age group 46-50 years. Lump in the breast was leading symptom reported by 80%. 20% of patients presented with lump with ulceration in the breast. 36% presented with lump, skin ulceration and pain. The commonest site was the upper outer quadrant that account for 40%. In 50% of the cases presented with lump with the size between 6-8 cms. only 2 patients the size of lump was greater than 11 cms.

**Keywords:** Breast carcinoma, Invasive ductal carcinoma, Modified Radical Mastectomy, Breast Conservation Therapy, Chemotherapy.

## Introduction

Breast cancer is the commonest cancer in females in the world. It ranks second to carcinoma cervix in the developing countries including India.

Surgery, radiation therapy, chemotherapy and hormone therapy are the various modalities of

treatments which may be used alone or in combination. The natural history of breast cancer has not been fully elucidated, but physicians are making progress in the treatment of patients. A better understanding of the natural history of breast cancer may translate into improved treatment and better outcomes.

**Aims and Objectives**

1. To study the patients presenting with carcinoma breast with respect to clinical presentations.
2. To study the management of carcinoma breast.

**Materials and Methods**

This prospective clinic-pathological study, has been carried out in patients presenting with breast cancer at Sree Siddhartha medical College Hospital Tumkur, Between November 2007 to April 2009.

A study of 30 cases was done, involving the detailed history including the age of the patients, type and duration of symptoms, family history of any breast lesions, age or menarche and menopause were taken.

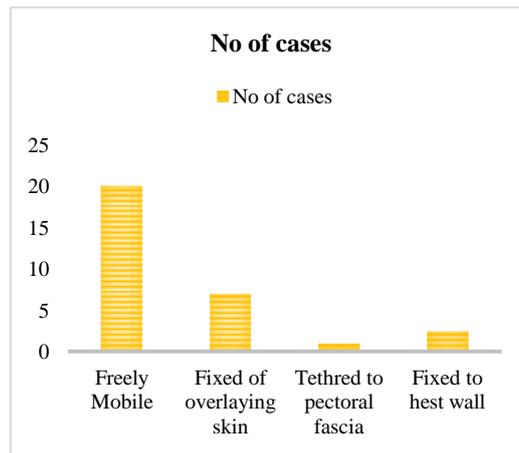
A thorough physical examination including the site, size, skin changes, nipple areolar changes, mobility and lymphonodal status etc were done. All female patients with breast cancer are included in the study. The investigation and interventions done on the patients with their consent. Routine blood examinations, with Chest X-ray and FNAC, and wedge biopsy were the investigations that were carried out on the patients.

The treatment of patients with primary breast cancer has evolved free extensive surgery, with or without radiation therapy to a more conservative approach. This change in paradigm from extensive surgery to breast conserving surgery was accompanied by an increasing interest in the development of adjuvant systemic therapy.

**Results and Observations**

Mean age of presentation was 47 years.

Age(yrs)	No .of cases	%
25-30	2	6.66
31-35	3	10.0
36-40	2	6.66
41-45	6	20.0
46-50	9	30.0
51-55	4	13.33
56-60	0	0
61-65	3	10.0
66-70	0	0
71-75	1	3.33



Age at Menarche	NO. of Cases
12-14	21
15-17	9

In our Study group 21 patients attained menarche at the age of 21-14 years. The mean age of menarche was 14.2 years. Risks of Carcinoma breast increases with early menarche of the age of 11 years.

Nulliparity constituted 13.3%.

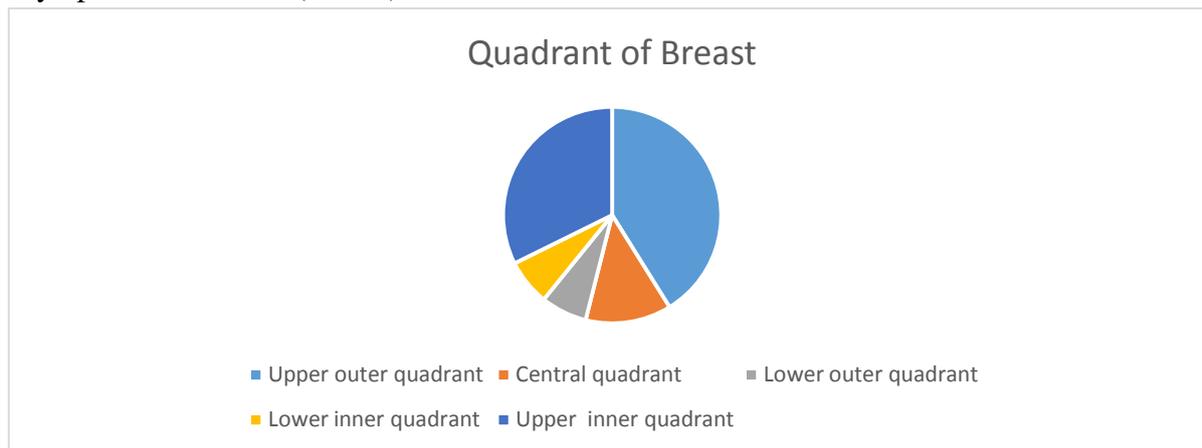
In 50% of the cases patients presented with lumps when they were the size between 6-8cms. Only in 2 patients the size of the lump was greater than 11cms. Lump in the breast was leading symptom reported by 80%. 20% of patients presented with lump with ulceration in the breast. 36% presented with lump, skin ulceration and pain.

Majority of the tumours were freely mobile (70%). Only 8 patients (26.6%) showed tumour fixity to the skin. One patient had tumour fixed to chest wall (3.33%).

**Fixity of Tumour**

Fixity	No of Cases	%
Freely Mobile	21	70
Fixed of overlaying skin	8	26.6%
Tethered to pectoral fascia	0	0
Fixed to chest wall	1	3.33%

Nodal status: number of patients with clinically palpable nodes were 22(73.4%).patient with clinically negative lymph nodes were 8 (26.6%)



The common site was the upper outer quadrant that accounted for 40% of the cases. The upper quadrant was most commonly involved (cases) accounting for 64% followed by upper inner quadrant 16% (4cases).

**Operative Procedure**

Breast Conservation Therapy = 5(16.6%).

Modified Radical Mastectomy = 24(80%).

Toilet Mastectomy = 1(3.3%)

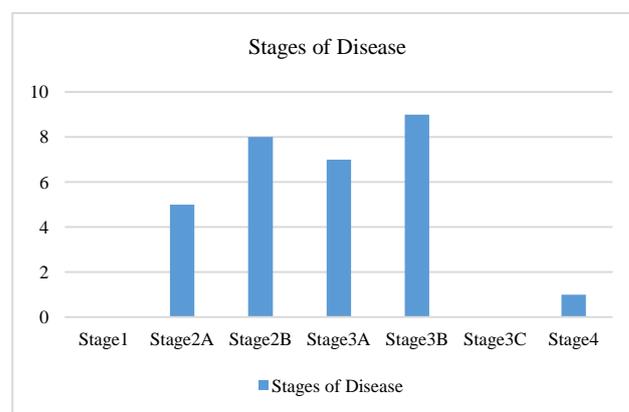
In the study group 5patients.underwent Breast Conservation therapy and 24 patients underwent, Modified Radical Mastectomy, except for 1 patient who underwent Toilet mastectomy.

Majority of the patients belonged to stage3B (33.3%). There were no patients in the stage 1 and one patient stage 4

**Discussion**

Age: Median age was 47 years in our study. Vinod Raina et al also reported a median age of 47 years<sup>1</sup>. Amit Goel et al have reported the commonest age group with breast cancer is 30-40 years<sup>2</sup>.

Menstrual status: In our study group 21 patients attained menarche at the age of 12-14 years. The mean age menarche was 14.2years.



Donegan et al in their study involving 764 cases reported the most common quadrant involved to be the upper outer (40%) followed by upper inner (17.4%), Central (12.5%), Lower outer (9%) and lower inner (4.4%) respectively<sup>3</sup>.

Pande et al (1982) have reported an incidence of painful and hard lump in 13.9% nipple discharge in 2.8% and ulceration of the breast in 6% of the cases in their study<sup>4</sup>.

In Yorkshire (1983) series, 84% of the patients presented with a lump, 5% with a lump with pain, 2% of the patients with nipple discharge<sup>5</sup>.

The results in this study are comparable to the other studies except that ulceration is more common in this study. The incidence of ulceration in the present series may be due to patients reporting late to the hospital.

The duration of symptoms in our study varied from 6 months to 3 years. Majority of the patients belonged to the group which had symptoms for a duration of one year or less.

Hagenson (1971) reported a mean delay of symptoms for 7 and a half months before presentation<sup>6</sup>.

Pande et al (1982) reported a mean delay of 6 months in their study<sup>4</sup>.

The commonest side of breast affected is left (53.8%).

The commonest site was the upper outer quadrant that accounted for 40% of the cases.

Srivastava (1994) reported breast carcinoma affecting right breast in 45.8% cases and left breast in 53% of cases in his study<sup>7</sup>. Donegan and Haagenson reported the same to be 51%, 45.9% and 49%, 57% respectively in their studies<sup>6</sup>.

Breast cancer was staged using TNM system in all cases in the present study.

Majority of the patients to stage 3B (33.3%). There were no patients in stage 1 and one patient in stage 4.

### Treatment

Five patients underwent Breast conservation therapy and 24 patients underwent Modified radical mastectomy and one patient underwent Toilet mastectomy. All the patients were referred to Kidwai Memorial Institute of Oncology Bangalore for radiotherapy and follow up.

### Summary and Conclusion

This is a prospective study of carcinoma breast regarding its clinical presentations. The Study of has been done between November 2207 to April 2009 (one and a half years)

After analysing the data in this study, the following conclusions were made.

The carcinoma breast was commonly seen in the age group seen in the age group 46-50 years. Amit Goel et al have reported the commonest age group to present with breast cancer is 30-40years<sup>2</sup>.

All the patients in our study were married. Carcinoma breast is more common in spinsters. There were no spinsters in our study. This may be related to smaller sample size. Majority of the patients were married between the ages 16-20 years.

In our study group 21 patients attained menarche at the age of 12-14 years. The mean age of menarche was 14.2 years. Risk of carcinoma breast increases with early menarche before the age of 11 years.

Nulliparous women consisted 13.3% of the study group. D.Huo et al in their study have reported that parity was negatively associated with risk<sup>8</sup>.

There were 42.9% premenopausal women in the study, and 52.1% of postmenopausal women. With a mean age of menopause at 46.52 years.

### References

1. Vinod Raina et al: clinical features and prognostic factors of early breast cancer at major cancer center in North India
2. Amit Goyal : Management of axilla in patient with breast cancer” Indian journal of surgery ;nov-dec 2009,vol 71,no6328-334
3. Van Donegan et al :Randomised clinical trial in assess the value of breast conserving therapy in stage I and stage II breast cancer EORTC 10801 trial. J Nat 1 CA Inst Mongr 1992(11)15-18
4. Pandey et al: Primary sarcoma of breast, ,Journal of surgical oncology 87(3) 121-125 2004.
5. Yorkshir et al :Breast cancer outcomes in South Asian population of West.,British journal of cancer 90(10) 1926,2004.
6. Kelly K Haegsen et al : The role of MAP KINASE AND MAP KINASE Phosphatase-1 in resistance to breast cancer treatment.. Cancer metastasis. 2010,march;29(1)
7. Srivastava et al: Mammographic screening or breast cancer awareness? Time of Ponder. Indian Journal of surgery 2017 oct 79(5)446-449.
8. Huo D et al: Comparison of breast cancer molecular feature and survival by african and European Ancestry in the Cancer genome atlas. JAMA Oncol 2017 Dec 1;3(12) 1652-1662.