VOLUME - 11, ISSUE - 10, OCTOBER - 2022 • PRINT ISSN No. 2277 - 8160 • DOI : 10.36106/gjra

Original Research Paper

General Surgery

IS MAMMOGRAPHY REALLY NECESSARY IN CLINICALLY SUSPECTED CANCER BREAST PATIENTS IN INDIAN SCENARIO

Dr. Harshal Tambe	MBBS, DNB General Surgery
Dr. Shyam Bhagat	MBBS, MS General Surgery
Dr. Snehal Purandare*	MBBS, MS General Surgery *Corresponding Author

ABSTRACT **Aims & Objectives:-** 1)To Study the role of mammography in clinically suspected Cancer Breast patients. 2)To study clinical presentation & pathological staging of carcinoma breast at tertiary health care center. **Study Design:-** This is a prospective, observational study of patients treated at tertiary health care center, pune. **Type of study:** Prospective observational study. Period of study: July2019-July2021 **Sample size:-** 70 Patients studied over a period of July2019-July2021. Patients coming to tertiary health care center with signs and symptoms of breast cancer were included in the study. **Conclusion :-** Double Assessment should be considered in clinically suspected Cancer Breast patients.

KEYWORDS : Role of Mammography, Double Assessment.

INTRODUCTION

India is a sub-continent with wide ethnic, cultural, religious, and economic diversity and variation in the health care infra-structure. The health care facility pattern is heterogeneous, with numerous regions where the benefits of the awareness, early diagnosis, and multidisciplinary treatment programs have not reached.[1] With rising incidence and awareness, breast cancer is the commonest cancer in urban Indian females, and the second commonest in the rural Indian women. The numerous myths and ignorance that prevail in the Indian society result in an unrealistic fear of the disease. Breast cancer awareness programs are more concentrated in the cities and have not reached the remote and rural parts of the country. Women often do not present for medical care early enough due to various reasons such as illiteracy, lack of awareness, and financial constraints.[2] It is hardly surprising that the majority of breast cancer patients in India are still treated at locally advanced and metastatic stages. Lack of an organized breast cancer screening program, paucity of diagnostic aids, and general indifference towards the health of females in the predominantly patriarchal Indian society do not help early diagnosis of breast cancer.

Epidemiology of breast cancer across different Population base cancer registries (PBCRs) & hospital-based cancer registries HBCRs) in India shows increasing trends for incidence and mortality mainly due to rapid urbanization, industrialization, population growth and ageing affecting almost all parts of India. Factors such as age, race, marital status, location (Urban/Rural), BMI, breast feeding, waist to hip ratio, low parity, family pre-disposition these are non-preventable factors as well as non-modifiable & are mainly responsible for cancer breast. Preventable Factors like obesity, alcohol consumption, tobacco chewing, smoking, lack of exercise, diet, environmental factors were major risk factors to increasing incidence cancer breast; however, these are not mainly responsible for development of cancer breast in India.[1,3,4,5]

AIMS & OBJECTIVES

1) To Study the role of mammography in clinically suspected Cancer Breast patients.
2) To study clinical presentation & pathological staging of carcinoma breast at tertiary health care center.

MATERIALS & METHODS

This is a prospective, observational study of patients treated at tertiary health care Hospital, Pune, Maharashtra. The patients identified from. the admission starting from July2019-July2021, with complete knowledge and consent of the patient. Type of study is Prospective observational study. Patients coming to tertiary health care center with signs and symptoms of breast cancer was included in the study. There is no conflict of interest in this study.

OBSERVATIONS & RESULTS:-

The data on categorical variables is shown as n (% of cases) and the data on continuous variables is presented as mean and standard deviation. The inter-group statistical comparison of distribution of categorical variables is tested using Chi-Square test or Fisher's exact probability test if more than 20% cells have expected frequency less than 5. All results are shown in tabular as well as graphical format to visualize the statistically significant difference more clearly. In the entire study, the p-values less than 0.05 are considered to be statistically significant. The entire data is statistically analyzed using Statistical Package for Social Sciences (SPSS ver 24.0, IBM Corporation, USA) for MS Windows.

Table 1:- Age distribution of cases studied in the study group.

Age group (years)	No. of cases	% Of cases
31 – 40	16	22.9
41 – 50	25	35.7
51 – 60	22	31.4
61 – 70	7	10.0
Total	70	100.0

Age distribution of cases studied :-

Of 70 cases studied, 16 cases (22.9%) had age between 31 – 40 years, 25 cases (35.7%) had age between 41 – 50 years, 22 cases (31.4%) had age between 51 – 60 years and 7 cases (10.0%) had age between 61 – 70 years. The mean ± SD of age in the study group was 48.44 ± 8.94 years and the minimum – maximum age range was 34 – 67 years.

Table No 2 :- Distribution of size of lump among the cases studied

Size Of Lump (cm)	No. of cases	% Of cases
1 – 3	30	42.9
4 – 6	40	57.1
Total	70	100.0

Table3:- Distribution of clinical staging among the cases studied

Clinical staging	No. of cases	% Of cases
IA	9	12.9
IB	4	5.7
IIA	22	31.4

IIB	19	27.1
IIIA	5	7.1
IIIB	7	10.0
IIIC	2	2.9
IV	2	2.9
Total	70	100.0

Table 4:- Distribution of cases according to BIRAD scoring.

BIRAD Score	No. of cases
BIRAD 4	42
4a	12
4b	07
4c	23
BIRAD 5	28
Total	70

Of 70 cases studied, 42 cases had BIRAD score 4 & 28 cases had BIRAD score 5

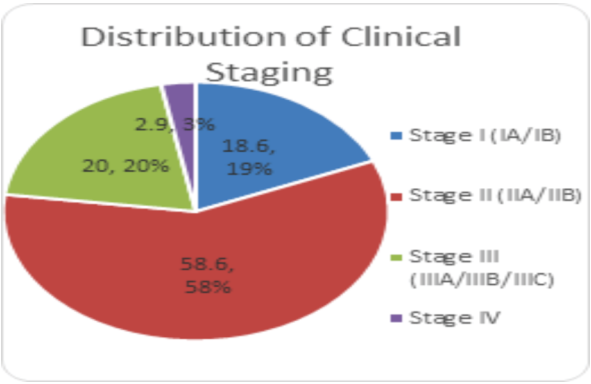

Figure 1:- Distribution of clinical staging among the cases studied:-

Of 70 cases studied, 13 cases (18.6%) had Stage I, 41 cases (58.6%) had Stage II, 14 cases (20.0%) had Stage III and 2 cases (2.9%) had Stage IV.

DISCUSSION :-

With increasing incidence of breast cancer among women all over the world and in India with an increasing trend seen in younger population.The mortality rates for breast cancer continue to rank the highest in India. According to report of National Cancer Registry Programme, India 2020 Cancer of the breast is the most common cancers in women. The highest burden of breast cancer was observed in metropolitan cities. There is an increase in the trend of incidence of breast cancer, whereas cervix uteri cancer is on the decline. A steady increase in breast cancer in most of the population-based cancer registries including newer population-based cancer registries, poses a great health challenge to women in India.[6,7,8]

Considering increase in incidence of breast cancer in India accurate detection is important. Currently as per standard norms triple assessment is used for detection of cancer breast. Out of which the role of mammography in clinically suspected Cancer breast patient in Indian scenario is questionable. The sensitivity of this investigation increases with the age as the breast becomes less dense. Normal mammography does not exclude the presence of carcinoma. As with every diagnostic test the sensitivity and specificity of mammography screening are not perfect; various levels of sensitivity and specificity for detecting breast cancer have been published [20,21]. The risk of experiencing a false positive mammogram for women undergoing biennial screening from age 50 to 69 years in Europe is about 20% [21], and the risk of experiencing a biopsy due to a false positive test is 3%. The challenges with a false positive test, apart from the monetary costs, are impaired psychological well-being and changes in health behaviour among women with the false positive test.

In our study 70 patients of clinically suspected cancer breast was taken out of which 58.6 % presented with stage II disease & 20% presented with stage III disease. So clinical examination & core cut biopsy was confirmatory to reach diagnosis of cancer breast. Considering cost of mammography, time consumed by the procedure & reporting in Indian scenario, its availability at every center & Even if mammography is s/o BIRAD IV A & B, BIRAD V. Patient need core cut biopsy for diagnosis of malignancy & further treatment in the form of Surgery/ Chemotherapy/ Radiotherapy depending on the stage of the disease. Then why not double assessment (Clinical examination & Core Cut biopsy) is consider for detection of clinically suspected cancer breast patients.[9,10]

CONCLUSIONS

70 cases of clinically suspected carcinoma breast were evaluated in the present observational study & following conclusion were drawn: -

1. Double Assessment should be consider in clinically suspected cancer breast patient.
2. Highest incidence was found between fourth & fifth decade.
3. Patient presenting with stage III & Stage IV Breast carcinoma need multidisciplinary approach for the treatment. Ideally all modalities of management namely Surgery, Radiotherapy & Chemotherapy should be available under one roof so that patient remains compliant.
4. Delayed disease presentation due to illiteracy, lack of awareness, financial constrains in some regions of India leads to late diagnosis, which in turn increases morbidity rate & mortality rate. Lack of organized breast cancer screening program, paucity of diagnostic aids, and general in difference toward the health of females in the pre- dominantly patriarchal Indian society are also the draw- backs leading to increase in late presentation of breast cancer to health care system. Hence majority of patients here are still treated at locally advanced and metastatic stages

REFERENCES:

1. National Cancer Registry Program . Ten year consolidated report of the Hospital Based Cancer Registries, 1984–1993, an assessment of the burden and care of cancer patients. New Delhi: Indian Council of Medical Research; 2001. [Google Scholar]
2. Agarwal G, Pradeep PV, Aggarwal V, Yip CH, Cheung PS. Spectrum of breast cancer in Asian women. World J Surg. 2007;31:1031–40. [PubMed] [Google Scholar]
3. Chopra R. The Indian scene. J Clin Oncol. 2001;19(18 suppl):106S–111S. [PubMed] [Google Scholar]
4. Aggarwal V, Agarwal G, Lal P, Krishnani N, Mishra A, Verma AK, Mishra SK: Feasibility study of safe breast conservation in large and locally advanced cancers with use of radiopaque markers to mark pre-neoadjuvant chemotherapy tumor margins. World J Surg 2007, Nov 21; Epub ahead of print. [PubMed]
5. Bland KI, Beenkum SW & Copiland EM. The Breast In: Brunicardi FC, Anderson DK, Billiar T et al, Eds. Schwartz's Principles of Surgery, 8th edition, New York, Mc Grave Hill, 2005, 16: 453-497.
6. Recommendations of the minutes of Cancer Estimation of Cancer Incidence, mortality and prevalence in India – Methodology held at NCDIR, Bangalore, July 2018.
7. *American Cancer Society's publications, Cancer Facts & Figures 2021 and Cancer Facts & Figures 2020; the ACS website; and the National Cancer Institute's Surveillance, Epidemiology, and End Results (SEER) Program (sources accessed January 2021).*
8. WHO International Classiication of Diseases for Oncology (ICD-O) Third Edition, eds. Fritz, A., Percy, C., Jack, A., Shanmugaratnam, K., Sobin, L., Parkin, D.M. and Whelan,S. 2019, World Health Organization, Geneva.
9. Moyer A. Psychosocial outcomes of breast-conserving surgery versus mastectomy: a meta-analytic review. Health Psychol 1997;16: 284–298.
10. Carver CS, Smith RG, Petronis VM, et al. Quality of life among long-term survivors of breast cancer: different types of antecedents predict different classes of outcomes. Psychooncology 2006;15 :749–758.