



A Study on Incidence and Analysis of Carcinoma of Breast in Early Stage in Tertiary Care Hospital

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Introduction

Worldwide, Breast cancer is by far the most common cancer amongst women with an incidence rate more than twice that of colorectal cancer and cervical cancer and about three times that of lung cancer.^{1,2,3,4} The incidence of breast cancer in India is on the rise and is rapidly, becoming the number one cancer in females pushing the cervical cancer to second place.^{5,6,7,8}

It is reported that one in 22 women in India is likely to suffer from breast cancer during her lifetime while the figure is definitely more in America where eight being victim of this deadly cancer. The problem with preventing breast cancer is that there is no one cause that can be pinpointed as being the culprit. Of course screening for the presence of BRCA – 1, BRCA – 2 mutations in available, though it must be admitted of being little use in the Indian context.^{9,10,11,12}

The study has been undertaken to emphasis the importance of spreading awareness of the prevalence of this cancer and educating women for self breast examination as a part of early screening step. Health officials must try & talk about this condition so that women have a say in

their own health. Screening procedures like mammography, FNAC & biopsy, need to be widely publicized so as to what exactly they are letting themselves in for.^{13,14,15,16,17}

In this study, we can do

1. To identify the incidence of early breast cancer, in Govt Sivagangai Medical College, Sivgantai
2. To analyze the age wise incidence of carcinoma breast.
3. To analyze the clinical staging at the time of admission.
4. To improve the awareness regarding early detection of breast cancer by means of multi modality screening procedures.
5. To analyze the preventive measures.
6. To analyze the multimodality treatment options in early breast cancer.

Materials and Methods

Cases of carcinoma breast admitted in Govt Sivagangai Medical College, Sivgantai, during the period of August 2014 to November 2016 were studied, out of which were 1 male patient and he is excluded from the study.

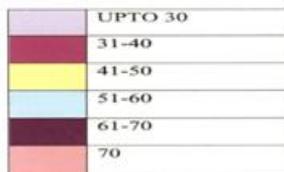
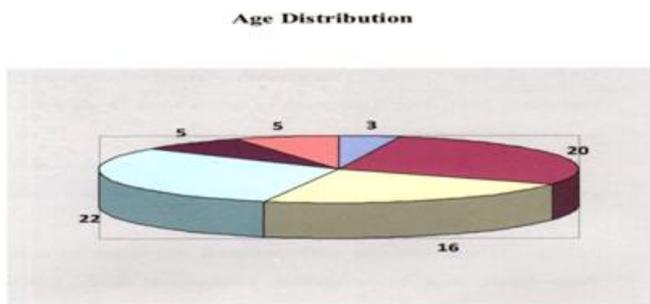
A detailed history has been taken and thorough general examination was made and cases were studied. These patients were analyzed according to age, clinical Presentation, stage of the disease, menopausal status, and treatment offered. A special attention was given to EBC for whom complete cure is possible there by reducing mortality and morbidity.

Results

Table 1 Age Distribution

Age in Years	Cases			
	No.		%	
Up to 30	3		4%	
31-40	20	36	28%	51%
41-50	16		23%	
51-60	22	32	31%	45%
61-70	5		7%	
> 70	5		7%	
Total	71		100	

Graph 1- Age Distribution



In this group, maximum numbers of patients were found in the age group of 31-50 years whereas the incidence was less in the extremes of age.

Age Wise Distribution of Staging

Table 4 Age Wise Distribution of Staging

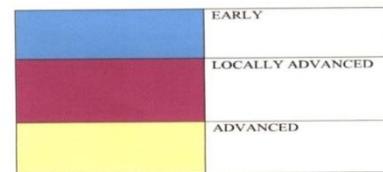
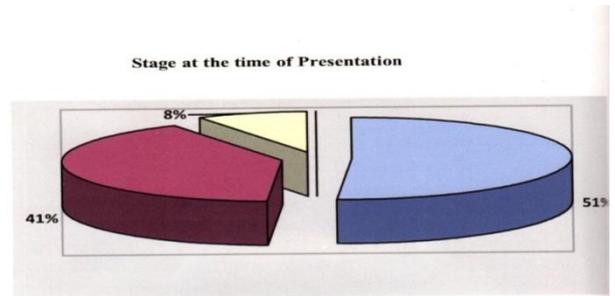
Age group	I	II A	II B	III A	III B	III C	IV	Total
Up to 30	1	2	0	0	0	0	0	3
31-40	1	4	7	3	4	0	1	20
41-50	0	3	5	2	4	0	2	16
51-60	1	3	4	8	2	1	3	22
61-70	1	0	3	0	0	1	0	5
> 70	0	1	0	4	0	0	0	5
Total	4	13	19	17	10	2	6	71

Stage at the time of Presentation

Table 2- Stage

Type of Breast Cancer	Cases	
	No.	%
Early breast cancer I & II	36	51%
Locally advanced breast cancer III	29	41%
Advanced Carcinoma breast	6	8%
Total	71	100

Graph 2-Stage



In this study group, 51% belong to early breast cancer and an equivalent percentage to locally advanced breast cancer. 8% of patients were in the advanced stage.

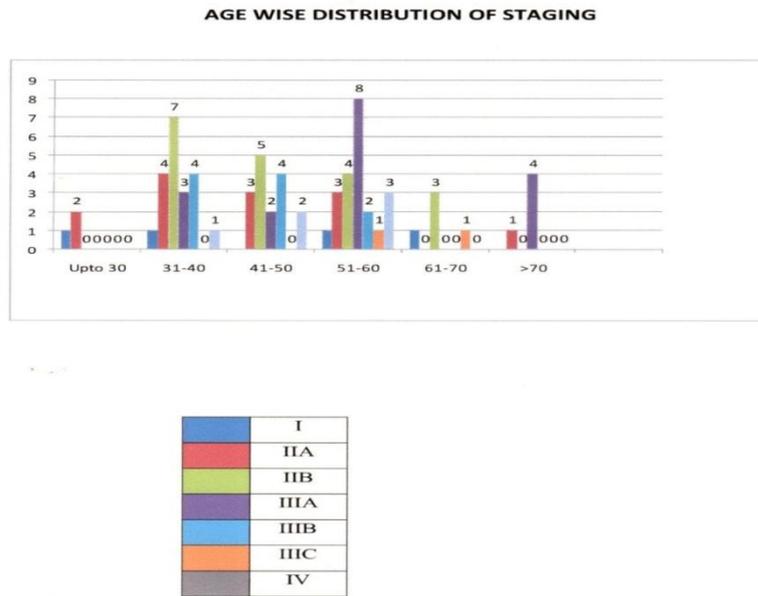
Menopausal Status

Table 3 Menopausal Status

Menopausal Status	Cass	
	No	%
Pre menopausal	32	45%
Post Menopausal	39	55%
Total	71	100

In this study, 45% were pre menopausal and 55% were post menopausal.

Graph 3 Age Wise Distribution of Staging

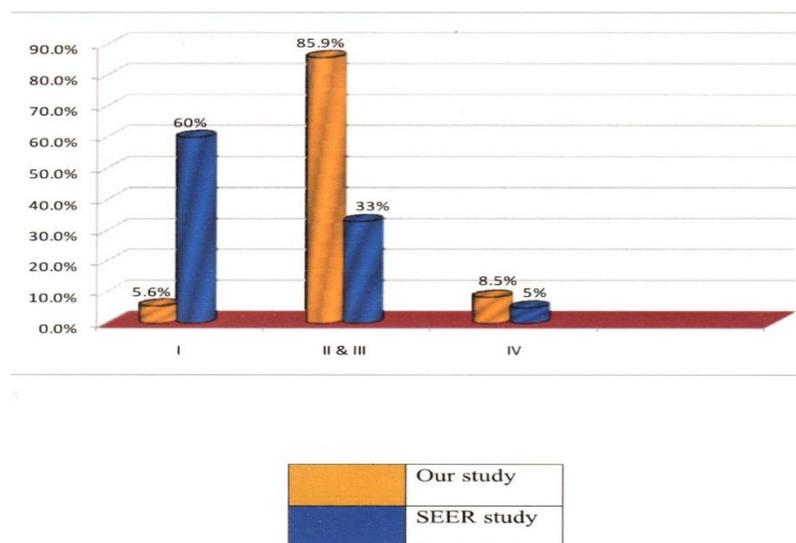


Comparison between our study and SEER study of National Cancer Institute, US. (2004-2008)
 Table 5- Comparison with Other Study

Stage of Breast Cancer	Our study	SEER Study
I	5.6%	60%
II & III	85.9 %	33%
IV	8.5%	5%

Age at Diagnosis	Our study	SEER Study
Under 20 years	0%	0%
20-34 yrs	7%	1.9%
35-44 yrs	31%	10.2%
45-54 yrs	24%	22.6%
55-64yrs	24%	24.4%
> 65 yrs	14%	42%

Graph 4- Comparison with other Study



Discussion

71 cases of Carcinoma breast, admitted in Govt Sivagangai Medical College, Sivganga, Trichy, are presented in this study. The maximum age incidence of Carcinoma breast in the study group has been 51-60 years of age.

In this study group, about 5.6% of the patients were with stage I disease. This when compared to the SEER study of National Cancer Institute, US was very low where stage I accounted for 60%.^{18,19,20} This reflects the need for spreading the awareness among women regarding self breast examination and utilizing screening programme.

Locally advanced breast cancer accounted for 85.9% where as it is only 33% in SEER study which again reinforces the need for improvement in health education. Stage IV disease accounted for 8.5% and 5% in my study and SEER study respectively.^{21,22,23,24}

All patients were assessed preoperatively by clinical examination, biopsy and for metastatic work up chest x-ray and USG abdomen were done.

All patients with early breast cancer underwent modified radical mastectomy and followed by hormonal therapy. Patients with positive nodal status were given adjuvant chemotherapy and radio therapy. Breast conservation therapy has not been attempted because of poor patient surveillance and lack of RT facilities.

All patients with locally advanced breast cancer were given neoadjuvant chemotherapy (3 cycles of CMF regimen) followed by modified radical mastectomy and adjuvant radiotherapy.

To conclude one of the important factors of fight against breast cancer is breast cancer awareness. This more knowledge known about the disease and the more done to check for early warning signs, the better chance for survival. Research and development continues to be done so that one day we can say the history of breast cancer is over.

Conclusion

The incidence of stage I breast cancer in this study group in only 5.6% whereas it is 60% in the SEER study of National Cancer Institute (NCI) of United States. LABC accounted for 85.9% in the study group whereas its only 33% in SEER study. The significance of this conclusion is that what cases are classified at a specific instance as LABC once belonged to the category of early breast cancer and subsequently evolved into LABC due to either patient's lack of awareness about the disease or inappropriate interventions or aggressive tumor biology. Thus as prevention is always better than cure it is recommended that the follow up measures can be adopted to address this problem,

- 1) Improving Health education regarding self breast examination.
- 2) Screening mammography as mammography is the corner stone of present state of the art approach to the control of breast cancer.
- 3) General education about early symptoms of the disease and access to medical facilities are important in diminishing breast cancer incidence.
- 4) Identification of high risk population and specific management. Women at increased risk should be counseled about modifiable risk factors like long term lactation by women in child bearing age, regular physical activity, limitation of post menopausal HRT.
- 5) Surveillance when family history is positive for breast cancer. Metastatic work up is mandatory.

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