A Study on Management of Early Breast Cancer

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Abstract

Background: Breast cancer is the 2^{nd} commonest malignancy in women, after Ca Cervix. Current studies have shown that early detection of breast cancer improves the survival rate upto 99%.

Aims and objectives: This study aims in finding out patients with early breast cancer and to treat them in early stages. To compare the various modalities of treatment of early breast cancer and follow up.

Materials and methods: prospective study on 53 cases with early breast cancer, admitted in Coimbatore medical college, during 2007-2010 and evaluated. Treated with breast conservative surgery and MRM in selected patients. Patients were followed up for the period of 5 years, and results were analysed.

Observations and Results: In our study, commonest age group having early breast cancer is between 40 to 50 years (38 cases). Most common histopathological variant is invasive ductal carcinoma (49 cases), 8 cases were subjected to breast conservative surgery, 42 cases were subjected to MRM, 3 cases were subjected to MRM with flap reconstruction. All the patients were followed up for 5 years, with adjuvant chemotherapy, radiotherapy, and hormonal therapy.

Conclusion: In our study, Breast conservative surgery has equal results with modified radical mastectomy with less morbidity.

Keywords: Axillary clearance, breast conservative surgery, early breast cancer, modified radical mastectomy.

I. Introduction

Cancer breast is one of the commonest malignant disease of women next to cancer cervix.^[1] It is estimated that 1/12 of all females develop this disease during her lifetime. Breast cancer accounts for 23% of all female cancers and responsible for 14% cancer related deaths in females. Current researches have demonstrated that breast cancer survival depends upon the earliest possible diagnosis. 99% cure rates are possible if detected in early stages.

II. Aims And Objectives

This study aims to find out the various modalities of presentation, percentage of patients presenting with breast cancer, to study about various histopathological types and receptor status and to study and compare the various treatment modalities for early breast cancer.

III. Materials And Methods

This study consisted of all patients admitted in all surgical units of Coimbatore Medical College from period 2007 - 2010, with early breast cancer.

A complete clinical evaluation of all the cases including history, general and physical examination, clinical breast examination was done. FNAC was done for all patients to confirm the diagnosis, B/L Mammogram, ultrasound breast and abdomen, LFT were done to stage the disease.

For loco regional control Modified radical mastectomy or breast conservative surgery with axillary clearance followed by whole breast irradiation was done. Depending on the patients options, adjuvant chemotherapy, hormonal therapy or radiotherapy as necessary was given and these patients were followed up for a period of 5 years.

IV. Observations And Results

During the period of study from august 2007 – September 2010 a total number of 186 breast cancer cases attended our institution. Out of this, 33 patients 17.7% of cases presented with early breast cancer. This study was consistent with that of FisherB, Je ong JH, Dignam J, et al. early breast cancer 15- 20%.

Stage Wise Incidence Of Breast Cancer

Total number of early breast cancer cases	- 53 cases
Number of cases in stage 1 -	17 cases
Number of cases in stage 2 a -	36 cases
Total number of locally advanced cases -	153 cases.

The other patients who presented in late stages 153 cases, were mostly unaware of the disease or they were taking native treatment until late stages. This shows a great need for health education programme and social awareness regarding breast cancer among the public.

There were no cases recorded below 28 years of age. There was an increased incidence of breast cancer between the ages of 40- 50 years of age -38 cases.

Most of the cases were between 41 - 50 years. The number of young women detected with breast cancer is increasing. (Early breast cancer triallist's collaborative group, Lancet 1998)^[17]The reasons may be changes in life style, late child birth and beginning of lactation. ^[3]Therefore early diagnosis is mandatory. This indicates screening of population for detection of breast cancer in early stages with mammography is necessary after the age of 40yrs.

Clinical Presentation

The most common form of clinical presentation was mass in the breast.				
Symptoms	No. Of Cases			
Lump Breast	53			
Mastalgia	8			
Nipple Discharge	6			
Preexisting Breast Lesions	4			

Trouse Desions

The commonest site was upper and outer quadrant in 33 cases.

Side Wise Incidence				
Side	No. Of Cases			
Left Breast	34cases			
Right Breast	19cases			

All patients had lump breast, 8 patients presented with mastalgia and 6 cases had nipple discharge. 4 patients had pre existing breast lesion – fibrocystic disease for which they were taking treatment. The commonest site of lump being the upper and outer quadrant in 33 cases and the side was left in 34 cases.

Treatment Modalities

Type Of Surgery Done	No. Of Cases
Modified Radical Mastectomy (Auchincloss's)	42
Breast Conservative Surgery With Axillary Clearance	8
Mrm With Tram Flap	3



Fig 1: Rt Mrm With Tram Flap Reconstruction



Fig 2: Breast Conservation With Axillary Clearance



Fig 3: Post Rt Mrm Status

Post Op Period

Mean hospital stay for patients with BCS with axillary clearance was 3.2 days, for MRM patients was 7.8 days. In MRM group 3 patients developed flap necrosis and 4 patients had lymphorrhea for more than 10 days. There were no post operative complications in BCS group.

Receptor Status

Number of cases with ER&PR receptor positive - 21 Number of cases with ER&PR receptor negative – 32

Histopathological Types			
HPE TYPES	NO. OF CASES		
Invasive ductal carcinoma(Fig.21)	49		
Invasive lobular carcinoma(Fig.22)	-		
Atrophic scirrhous carcinoma	2		
Medullary carcinoma	1		
Colloid carcinoma	1		

Nodal status :

Axillary nodes positive for ER/PR – 21 cases Axillary nodes negative for ER/PR - 32 cases

Follow Up

All the patients were followed up for a period of 5 years, there was no locoregional recurrence or distant metastasis.

Conclusion V.

In our study after a follow up of 5 years. There was no recurrence in patients who had undergone MRM or BCS with axillary clearance followed by RT. In continuity with Ken et al study whoclaimed that in earliest cancers the cure rate was 99%. Fischer et al, after a median follow up of patient for 5 years claimed results for MRM and BCS with RT were equal. In our study, Breast conservative surgery has equal results with modified radical mastectomy with less morbidity.

References

- Last's applied anatomy, 10th edition 1999 [1].
- Lee Mc Gregor's synopsis of surgical anatomy, 12th edition. [2].
- [3]. Walter and Israel pathology, 7th edition.
- [4]. Robbin's pathologic basis of disease , Cotran, Kumar and Robbins
- [5]. 5th edition, 1089-1110.
- Cancer principles and practice of oncology, Vincent T.Devita Jr 7th ed. [6].
- Clinical oncology, 3rd edition, Elsevier, Churchill and Livingstone. [7].
- Diagnosis and management of cancer, Ashok Mehta and S.C. Bansal, 1st edition. [8].
- M.D.Anderson surgical oncology handbook 2nd edition: Barry N Feig. Manual of clinical oncology 4th edition : Dennis A Casciato. [9].
- [10].
- Sabiston textbook of surgery, 18th edition. [11]
- [12]. Schwartz principles of surgery - 8th edition
- Bailey and love's short practice of surgery, 25th edition. 2007. [13].
- Oxford text book of surgery volume 1, Morris and Malt, 789 -844. [14].
- Essential surgical practise, 4th edition, Cuschieri, Giles, Moosa, 978 -909. [15].
- [16]. Breast cancer detection demonstration project, 1997.
- Fisher B Jeong JH, DignamJ, et al. Findings from recent NSABP studies in stage I breast cancer.J Natl cancer inst Monogr [17]. 2001: 30: 62-6.
- [18]. Early breast cancer triallist's collaborative group: systemic treatment of early breast cancer by hormonal, cytotoxic or immunotherapy (133 randomised trials involving 31,000 recurrences and 24,000 deaths among 75,000 women). Lancet, 339: 1 and 71, 1998.
- [19]. Consensus development conference on the treatment of early breast cancer, J.Natl. cancer inst. Monogr., Vol. 11, 2006.
- [20]. Fisher, B., Slack, N., Katrych, D., et al: Ten year follow up results of patients with carcinoma of the breast in a co operative clinical trial evaluating surgical adjuvant chemotherapy. Surg. Gynaecol. Obset., 140: 528, 1975
- [21]. Scanlon, E.F., and Caprini, J.A. Modified radical mastectomy. Cancer, 35: 710, 1975.
- [22]. Turner, L. Swindell, R. Bell, W.G.T., et al: Radical versus modified radical mastectomy for breast cancer. Ann . R. Coll. Surg. Engl., 63: 239, 1981.
- [23]. Vicini, F. A., Recht, A., Abner A., et al. Recurrence in the breast following conservative surgery and radiation therapy for early breast cancer. Monogr. Natl Cancer Inst., 11:33, 2003.
- [24]. Jordan, V.C.A current view of tamoxifen for the treatment and prevention of breast cancer. Br. J. Pharmacol., 110:507, 1993.
- [25]. National institute of health consensus Development panel on adjuvant chemotherapy and endocrine therapy for early breast cancer: Introduction and conclusions. NCI Monogr., 1: 1, 2006.
- [26]. Gallager, H.S., Pathologic types of breast cancer and their prognosis, cancer, 53:623, 2004.