



Original Research Paper

Reluctance To Accept Breast Conservation Surgery For Early Breast Cancers In Tribal Women Of Northern Maharashtra – A Cross Sectional Study

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Abstract:

Introduction: Breast cancer management involves either modified radical mastectomy (MRM) or breast conservation surgery (BCS) as the primary treatment modality followed by adjuvant treatments based on pathological characteristics. Breast conservation surgery (BCS) has now become the evidence-based standard of care globally in early breast cancer and also is being offered in some select suitable cases in locally advanced and large operable breast cancer after down-sizing with neo-adjuvant systemic therapy

Objective –To evaluate in detail the reasons of tribal women not accepting breast conservation surgery for early malignant breast cancers and how it can be considered as a treatment option and made acceptable to them.

Materials & Methods – A cross sectional study was conducted in a Rural Tertiary Care Medical College & Hospital in Northern Maharashtra in 102 Tribal Patients who underwent Modified Radical Mastectomy from 2018 to 2021. Total of 63 patients from Tribal Districts. The reasons for reluctance of the patients for BCS were studied and listed.

Results- The reasons of 63 tribal women patients not accepting breast conservation surgery for early malignant breast cancers. No patient was willing to undergo Radiation therapy postoperatively after Breast conservation surgery and all patients shown Tribal society still considers cancer as a social stigma.

Conclusion:BCS as a surgical technique has revolutionized the surgical treatment of early breast cancer. BCS has not only provided an acceptable oncological outcome, but has diminished the psychological burden. It is therefore important for the physician to educate patients about the treatments.

Key Words: Breast Cancer, Breast Conserving Therapy (BCS), Tribal Women

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INTRODUCTION:-

Breast cancer ranks among the leading causes of female cancer-related deaths in the world¹

breast cancer incidence is on the rise in India similar to the global phenomenon. Approximately 164,000 cases of breast cancer

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are diagnosed in India every year. The disease has gained a predominantly urban profile with many new cases seen in middle-aged working-class women with urban lifestyles. The incidence-to-mortality ratio for breast cancer is high, possibly attributed to the late-stage disease at presentation, inadequate medical facilities, and also the lack of awareness about disease symptoms, breast self-examination (BSE) and no routine mammographic screening. Late-stage breast cancer diagnosis with larger tumours results in higher mastectomy rates which aggravates the psychological trauma associated with the diagnosis resulting in depression and loss of self-esteem associated with losing an aesthetic organ and femininity².

Breast conservation surgery (BCS) has now become the evidence-based standard of care globally in early breast cancer and also is being offered in some select suitable cases in locally advanced and large operable breast cancer after down-sizing with neo-adjuvant systemic therapy². Over the last two decades, BCS is being offered increasingly to women in India as well, in women presenting with very early breast cancer, especially in the large cities and metros. The level of public awareness has increased significantly with more and more women being keen on maintaining their body image and understand the importance of completion of relevant treatment protocols and regular follow up. Breast cancer advocacy in India has evolved rapidly over the last couple of decades, and breast cancer is no longer considered a social stigma in urban India and is being discussed more openly in the public forums. However its still a taboo in Rural tribal India. Breast-conserving surgery (BCS) is a surgical procedure for Early Malignant Breast cancer which aims to remove the cancer while leaving as much normal breast as possible. Breast-conserving surgery is also known as 'lumpectomy', 'quadrantectomy', 'partial mastectomy', or 'segmental mastectomy' depending on how much tissue is removed.³

Although Breast Conservation Surgery is the mainstay treatment of Early Malignant Breast Cancers, Tribal Maharashtrian Women still consider it as a taboo. Their Society in general

does not accept it as a treatment modality. Hence this study conducted with the aim of to know the reasons for reluctance of tribal women to undergo Breast Conservation Surgery for Early Malignant Breast Cancers

MATERIALS & METHODS -

A cross sectional study was conducted in a Rural Tertiary Care Medical College & Hospital in Northern Maharashtra in 102 Tribal Patients who underwent Modified Radical Mastectomy from 2018 to 2021. Total of 63 patients from Tribal Districts who satisfied the Gross Criteria were included in the study and the 39 patients were excluded. All 63 Patients were eligible for Breast Conservation surgery as per the gross criteria.

However none of the eligible patients consented to Breast conservation surgery. The reasons for reluctance of the patients were studied and listed.

The Gross Criteria for Breast Conservation Surgery includes but is not limited to the following factors²

- The patient is concerned about losing a breast.
- Willing to have radiation therapy.
- Have not already had that breast treated with Radiation therapy or BCS.
- Have only one area of cancer in the breast, or multiple areas in one quadrant (multifocal) that are close enough to be removed together .
- Have a tumor smaller than 5 cm (2 inches) in the largest dimension.
- Not pregnant.
- Do not have a BRCA or ATM gene mutation
- Do not have certain serious connective tissue diseases such as scleroderma or Sjögren's syndrome.
- Do not have inflammatory breast cancer
- Do not have positive margins in a previously operated case.

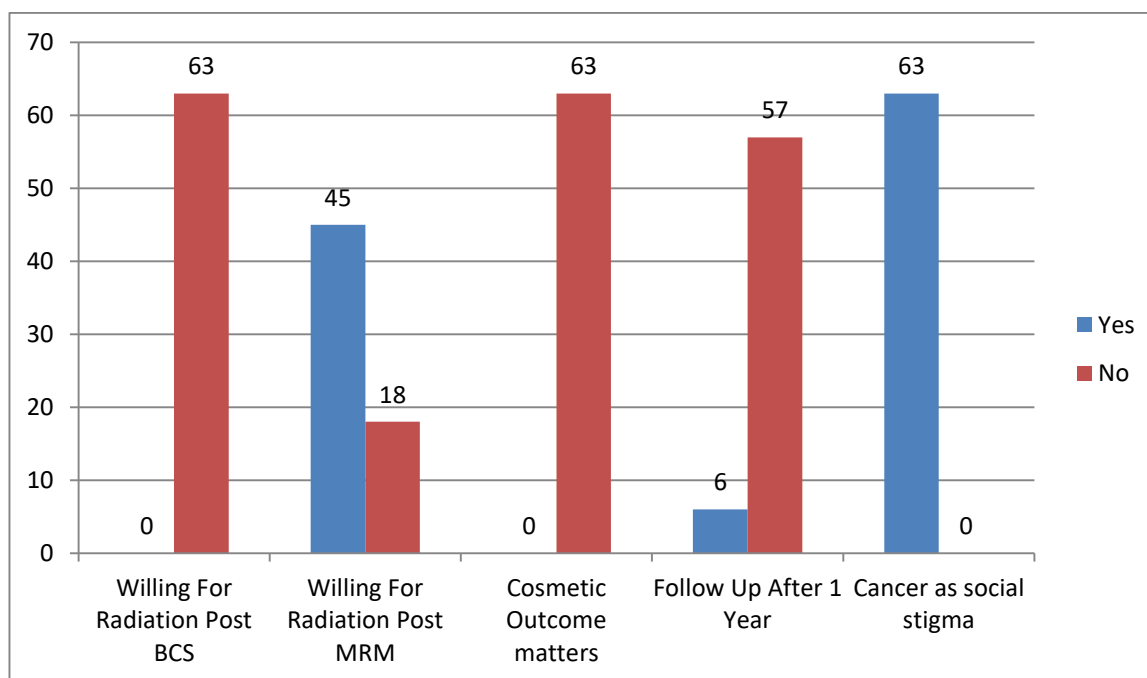
Statistical Analysis: All the demographic and clinical data of the participants were recorded. All data were processed, analyzed and disseminated by using MS Excel and SPSS version 23 program as per necessity.

RESULTS-



The reasons of 63 tribal women patients not accepting breast conservation surgery for early malignant breast cancers.(Table 1 and Graph1)

<u>Reasons</u>	<u>Yes</u>	<u>NO</u>
patient was willing to undergo Radiation therapy postoperatively after Breast conservation surgery	00	63
patients were ready for radiation therapy post Modified Radical Mastectomy	45	18
Cosmetic outcome does not matter in tribal women	00	63
women are Women in Tribal Maharashtra are known for not giving long term follow up	06	57
Tribal society still considers cancer as a social stigma	63	00



DISCUSSION:-

The initial surgical treatment of breast cancer was typically wide excision, but was associated with a high rate of local recurrence and poor survival. William Halsted popularized radical mastectomy in 1894⁴.Radical mastectomy (RM) resulted in a significant drop in the local recurrence rate, but the curative potential remained limited. In our study various reasons were shown by tribal patients listed accordingly in results table and also expressed the reluctance for retaining a part of healthy organ post removal of diseased part and reluctant to undergo neoadjuvant chemotherapy or adjuvant radiotherapy or chemotherapy

At different times, Modified Radical Mastectomy (MRM), Total (Simple) Mastectomy, and more recently, Skin sparing mastectomy (SSM) and Nipple sparing mastectomy (NSM) were introduced. Attempt with extended radical mastectomy, which

included internal mammary node dissection, failed to improve survival.^{4,5}

Although MRM is a less morbid procedure compared to RM, the patient will still require a loss of the breast. The attempt to preserve the breast without compromising survival brought up the use of Breast Conserving Therapy (BCS). This includes breast conserving surgery and breast radiotherapy. Although BCS and breast conserving surgery (BCS) are used interchangeably, strictly speaking BCS includes both BCS and breast radiotherapy.

BCS is an important part of the breast-conserving therapy, which may be defined as a combination of conservative surgery for resection of the primary tumor with or without surgical staging of the axilla, followed by radiotherapy for the eradication of the residual microscopic disease of the breast, with or without adjuvant systemic therapy.

The aim of this communication is to highlight the indications, contraindications, surgical



techniques, and complications of BCS.

The National Surgical Adjuvant Breast and Bowel Project (NSABP) B 06 compared TM to lumpectomy, with or without radiation therapy, in the treatment of stages I and II breast cancer. After five- and eight-year follow-up periods, the disease-free, distant disease-free, and overall survival rates for lumpectomy, with or without radiation therapy, were similar to those observed after TM. However, the incidence of ipsilateral breast cancer recurrence (in-breast recurrence) was higher in the lumpectomy group that did not receive radiation therapy.⁶⁻¹⁰

CONCLUSION:

To conclude the main reasons as to why tribal women with malignant early breast cancer were reluctant to accept breast conservation surgery as a treat modality were – Although getting a microscopic negative margin is still challenging, BCS as a surgical technique has revolutionized the surgical treatment of early breast cancer. BCS has not only provided an acceptable oncological outcome, but has diminished the psychological burden, offered better cosmetic results, and reduced postoperative complications. It is therefore important for the physician to educate patients about the treatments. However extensive work is need of the hour to make this treatment option possible amongst women of Tribal Maharashtra.

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