

Original Research

Outcome of treatment of breast cancer surgery patients

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ABSTRACT:

Background: The present study was conducted to assess outcome of breast surgery patients. **Materials & Methods:** 90 patients who underwent breast surgery in last 2 years were included. Recurrence was defined as distant metastasis or loco-regional recurrence. Survival outcome was estimated. **Results:** Age group 20-40 years had 65 and 40-60 years had 25 patients. Type of surgery was breast conserving done in all 90 patients. Axillary lymph node dissection was done in 60 and sentinel lymph node biopsy in 30 patients. Chemotherapy was done in 56 and not done in 34 patients. Adjuvant radiotherapy was done in 62 and not done in 28, neoadjuvant chemotherapy was performed in 50, histologic grading was 1 in 26, 2 in 30, 3 in 24 and unknown in 10 patients. **Conclusion:** Maximum cases were seen in age group 20-40 years. Loco-regional metastasis was seen in 27 patients. Breast conserving surgery is the main treatment in breast cancer patients.

Key words: Axillary lymph node dissection, Breast, chemotherapy

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INTRODUCTION

Breast cancer is the most common female malignancy and is the second common cause of cancer death in women. Due to its high incidence, breast cancer is also a major health issue for women with medical comorbidities.¹ The presence of co-morbidities pose can influence the decision on the use of the various treatment modalities. Furthermore, several studies have reported a significant increase in cancer mortality and post-treatment morbidity in cancer patients with pre-existing health conditions.²

Surgical resection was one of the first effective treatments for breast cancer and continues to play a critical role in the treatment of this disease. A multidisciplinary approach is now standard of care, involving a coordinated effort with the surgeon working in concert with the medical and radiation oncologist to achieve the best possible outcome for each individual.³

Improvements in both the quality and quantity of life for victims of breast cancer can be attributed to the advances made in each of these disciplines. As with all cancers, earlier stage disease is more readily manageable than after significant advancement. It is these early-stage cancers in which the most significant improvements in the operative management has occurred.⁴

Researchers have suggested the lower rates of adjuvant therapy as well as the natural course of the pre-existing medical conditions was the potential link between the increased risk of death and the presence of comorbidities. However, some reported that elderly patients with co-morbidities have worse survival outcome despite the similar rates of adjuvant therapy administration.⁵ The present study was conducted to assess outcome of breast surgery patients.

MATERIALS & METHODS

The present study was conducted on 90 patients who underwent breast surgery in last 2 years. The study was approved from institutional ethical committee. All were informed regarding the study and their consent was obtained.

Data such as name, age, gender etc. was recorded. Recurrence was defined as distant metastasis or loco-regional recurrence. Survival outcome was estimated. Results were tabulated and subjected to statistical analysis. P value less than 0.05 was considered significant (P< 0.05).

RESULTS

Table I Distribution of patients based on age

Age group (Years)	Number	P value
20-40	65	0.01
40-60	25	

Table I shows that age group 20-40 years had 65 and 40-60 years had 25 patients.

Table II Assessment of parameters

Parameters		Number	P value
Operation type	Breast conserving surgery	90	-
Operation type (axilla)	Axillary lymph node dissection	60	0.02
	Sentinel lymph node biopsy	30	
Chemotherapy	Done	56	0.05
	Not done	34	
Adjuvant radiotherapy	Done	62	0.03
	Not done	28	
Neoadjuvant chemotherapy	Done	50	0.18
	Not done	40	
Histologic grade	1	26	0.17
	2	30	
	3	24	
	Unknown	10	

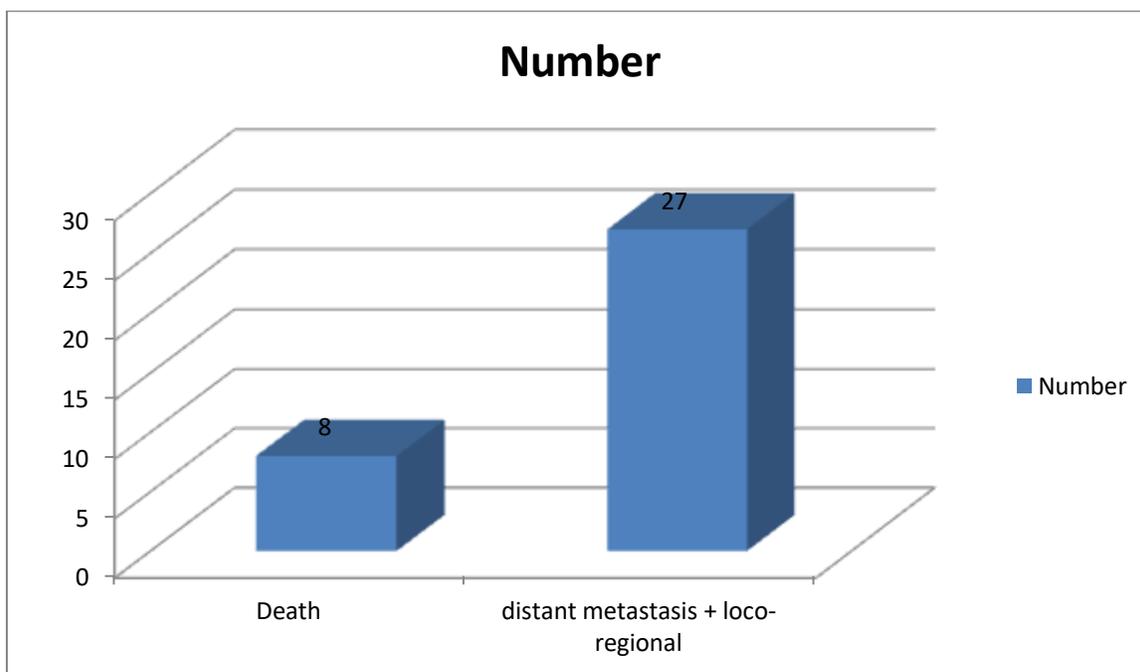
Table II shows that type of surgery was breast conserving done in all 90 patients. Axillary lymph node dissection was done in 60 and sentinel lymph node biopsy in 30 patients. Chemotherapy was done in 56 and not done in 34 patients. Adjuvant radiotherapy was done in 62 and not done in 28, neoadjuvant chemotherapy was performed in 50, histologic grading was 1 in 26, 2 in 30, 3 in 24 and unknown in 10 patients. The difference was significant (P< 0.05).

Table III Outcome of treatment

Outcome	Number	P value
Death	8	0.01
distant metastasis + loco-regional	27	

Table III, graph I shows that death occurred in 8 and distant and loco-regional metastasis was seen in 27 patients. The difference was significant (p< 0.05).

Graph I Outcome of treatment



DISCUSSION

Optimal management of a patient with breast cancer includes establishing a pathologic diagnosis prior to any definitive operative intervention.⁶ Formal surgical excision in the operating room is rarely required to establish the diagnosis of breast cancer, as there are many alternative techniques to obtain tissue for diagnosis. For example, much pathologic information can be gained from small, 1-2 mm “core” samples, allowing precise recommendations for treatment.⁷ The diagnosis of breast cancer is confirmed by histological evaluation, and the tumor is assessed for grade as well as human epidermal growth factor receptor 2 (HER2), estrogen, and progesterone receptor status. This information is critical for optimal decision making regarding treatment options, most importantly allowing for coordination of care for those patients that will benefit from neoadjuvant chemotherapy prior to operative intervention.⁸ The present study was conducted to assess outcome of breast surgery patients. In present study we found that age group 20-40 years had 65 and 40-60 years had 25 patients. Han et al⁹ found that there were 1,792 (71.6%), 665 (26.6%), and 44 (1.8%) patients in ASA I, II, and III, respectively. Total 95 (3.8%) deaths and 269 (10.8%) recurrences (loco-regional and distant) occurred during the median follow-up period of 71 months. Patients with high comorbidity showed significantly higher rate of deaths (51 (2.8%), 38 (5.7%) and 6 (13.6%) deaths in ASA I, II and III group, respectively, p<0.001). The ASA 3 patients also showed significantly higher rate of breast

cancer recurrence when compared to other groups (180 (10.0%), 80 (12.0%) and 9 (20.5%) in ASA I, II, and III, respectively, p = 0.041). Significantly fewer patients in the high co-morbidity group received adjuvant therapies (77 (4.3%), 44 (6.6%) and 8 (18.2%) in ASA I, II, and III, respectively, p<0.001). The increased recurrence of breast cancer in the high morbidity group was mostly seen in patients who did not receive adjuvant therapies. The incidence of serious adverse effect during the adjuvant therapy did not differ according to the co-morbidity conditions. We found that type of surgery was breast conserving done in all 90 patients. Axillary lymph node dissection was done in 60 and sentinel lymph node biopsy in 30 patients. Chemotherapy was done in 56 and not done in 34 patients. Adjuvant radiotherapy was done in 62 and not done in 28, neoadjuvant chemotherapy was performed in 50, histologic grading was 1 in 26, 2 in 30, 3 in 24 and unknown in 10 patients. Land et al¹⁰ have reported that the patients with higher degree of co-morbidity had significantly lower rates of recurrences despite their increased risk of deaths. We found that death occurred in 8 and distant and loco-regional metastasis was seen in 27 patients. Gold et al¹¹, on the other hand, have shown that omission of appropriate adjuvant therapies can worsen the treatment outcome even in early breast cancer patients. Locoregional (operative) control of breast cancer remains the mainstay of treatment. Surgical treatment should allow the patient to be involved in the decision-making process, with the surgeon providing information

about all surgical options available. Definitive surgical management typically involves breast conservation (BCT) or mastectomy. Local excision alone is at times acceptable, usually in the setting of elderly or otherwise debilitated patients without adjuvant radiation. This decision must be carefully weighed and based on evaluation of tumor aggressiveness and comorbid conditions of the patient.

The shortcoming of the study is small sample size.

CONCLUSION

Authors found that Breast conserving surgery is the main treatment in breast cancer patients. Maximum cases were seen in age group 20-40 years. Loco-regional metastasis was seen in 27 patients.

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