Original research paper

Breast cancer in elderly women: Clinical profile and management

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Abstract

Clinical examination should be systematic and take account of the nature of the lump and, if present, any skin dimpling or change in contour of the breast and also assessment of the axilla for presence of axillary nodes. Breast abnormalities should be evaluated by triple assessment including clinical examination, imaging (mammography and ultrasound) and tissue sampling done either fine needle aspiration cytology or core biopsy. This study was conducted on all the clinically diagnosed cases of breast cancer in elderly women aged above 60, who will undergo treatment based on clinicopathological diagnosis of breast cancer. Data collected after obtaining written informed consent. Among 50 patients, 23(46%) patients took adjuvant chemotherapy. 5(10%) patients took both adjuvant chemotherapy and radiotherapy. 4(8%) patients took only radiotherapy. 17(14%) patients did not take any adjuvant therapy.

Keywords: Breast cancer, elderly women, management

Introduction

Invasive breast cancer is the most common carcinoma in women. It accounts for 22% of all female cancers, is the leading cause of cancer deaths in women worldwide, accounting for more than 1.6% of deaths [1]. A recent study of breast cancer risk in India revealed that 1 in 28 women develop breast cancer during her lifetime. The average age of the high risk group in India is 43-46 years [31]. The incidence of breast carcinoma in India is 19.1 per 100,000 women compared to 87 in the UK and 101 in the US per 100,000 Women [2].

The most common presentation is lump in breast (60-70% of cases) Other symptoms are pain 14-18%, Nipple problems (discharge, retraction, distortion, eczema) 7-9%, Deformity 1%, Inflammation 1%, Family history is noted in 3-14%. Clinical examination should be systematic and take account of the nature of the lump and if present, any skin dimpling or change in contour of the breast and also assessment of the axilla for presence of axillary nodes. Breast abnormalities should be evaluated by triple assessment including clinical examination, imaging (mammography and ultrasound) and tissue sampling done either fine needle aspiration cytology or core biopsy [3, 4].

Imaging should include mammography except in women under age 40, where it is not of much value, unless there is strong clinical suspicion or tissue/needle biopsy evidence of

malignancy. The mammographic appearances of breast carcinoma are varied and include well defined, ill-defined and speculate masses, parenchymal deformity and calcification with or without a mass lesion. By far the most common manifestation of breast cancer on the mammogram is tumour mass without calcifications.

Ultrasonography is useful in differentiating solid and cystic lesions. Ultrasonography can be useful for discriminating lesions in the patient with dense breasts. Combination of ultrasonography and mammography allowed for an increased diagnostic yield of 4.2 cancers/1000 women [5].

MRI is increasingly being used for the evaluation of breast abnormalities. It is useful for identifying the primary tumor in the breast in patients who present with axillary lymph node metastases without mammographic evidence of a primary breast tumor (unknown primary). MRI may also be useful for assessing the extent of the primary tumor, particularly in young women with dense breast tissue and for evaluating invasive lobular cancers. The sensitivity of MRI for invasive cancer is higher than 90%, but is only 60% or less for DCIS [6].

Methodology
Source of data

All clinically diagnosed cases of breast cancer in elderly women admitted under department of general surgery were included in the study.

Inclusion criteria

All clinically diagnosed cases of breast cancer in elderly women (aged above 60years) admitted in department of general surgery.

Exclusion criteria

- Patient aged below 60 years of age.
- Patients of breast cancer previously treated in other institute.
- Recurrent breast cancer cases.

Method of data collection

This study was conducted on all the clinically diagnosed cases of breast cancer in elderly women aged above 60, who will undergo treatment based on clinicopathological diagnosis of breast cancer.

Data collected after obtaining written informed consent.

Study type: Hospital based case series study.

Number of cases: 50 cases of carcinoma breast in elderly.

Sampling technique: Non-probability purposive sampling technique.

Results

Table 1: Age Distribution of the Patients

Age interval	Frequency	Percentage
60-65	30	60
66-70	11	22
71-75	7	14
76-80	2	4

Among 50 patients, 30 (60%) were in a age group of 60-65, 11 (22%) patients were in 66-70 age group. 7 (14%) in 71-75 age group. 2 (4%) patients were in a age group of 76-80.

Table 2: Occupation of the Patients

Occuaption	Frequency	Percentage
Housewife	31	62
Labourer	13	26
Farmer	4	8
Teacher	2	4

Among 50 patients, 31 were housewives, 13 use to work as daily wage labourer, 4 working in field as farmer and rest 2 were teacher by occupation.

Table 3: Comorbidities in the Patients

Comorbidities	Frequency	Percentage
Present	24	48
Not present	26	52

Among 50 patients, 24(48%) patients had comorbidities and 26(52%) patients didn't had any comorbidities.

Table 4: Parity among the Patients

Parity	Frequency	Percentage
Nullipara	1	2
P1	4	8
P2	11	22
P3	13	26
P4	10	20
P5	7	14
P6	3	6
P7	1	2

Among 50 patients, 2% were nulliparous, P1 being 4 (8%), P2-11(22%), P3-13(26%), P4-10(20%), P5-7(14%), P6-3 (6%) and P7-1(2%).

Table 5: Family History of Breast Cancer in the Patients

Family history	Frequency	Percentage
Present	4	8
Not present	46	92

Out of 50 patients, 4 (8%) were having family history of breast cancer. 46 (92%) had no history of breast cancer in the family.

Table 6: Neoadjuvant Therapy among the Patients

Neoadjuvant therapy	Frequency	Percentage
Taken	14	28
Not taken	36	72

Among 50 patients, 14(28%) taken neoadjuvant chemotherapy and 36 (72%) didn't take neoadjuvant therapy.

Table 7: Adjuvant Therapy among the Patients

Age	ACT	ACT+RT	RT	No Adjuvant T
60-65	14	3	1	12
65-70	5	1	2	3
71-75	3	1	1	2
76-80	1	0	0	0

Among 50 patients, 23(46%) patients took adjuvant chemotherapy. 5(10%) patients took both adjuvant chemotherapy and radiotherapy. 4(8%) patients took only radiotherapy. 17(14%) patients did not take any adjuvant therapy.

Discussion

In our study involving 50 patients above the age of 60 years, it was found that 60% of the patients are in the age group of 60-65, 22% in the age group of 66-70, 14% in the age group of 71-75 and 4% of age group 76-80.

According to Yancik R *et al.*, in US, 55% of all breast cancer occur in the age group of 65years and older which constiture 13% [7].

The annual age specific cancer incidence rate per 100,000 for persons 45-49 years of age is approximately 300. For those ten years older, the incidence rate observed is more than double, approximately 750 [7].

Figures from developed countries quotes half of the patients seen are in elderly age group.

According to Diab S G *et al.*, incidence of breast cancer is 69% and 67% for 65 years and older patients [8].

In our study 13 patients out of 30 (43%) in the age group of 60-65, 6 patients out of 11(54%) in the age group of 66-70, 3 (42%) patients among 7 in the age group of 71-75 and 2 patients among 2 accounting for 100% of population have comorbities. Most common Medical comorbidities seen in patients were hypertension, diabetes and ischaemic heart diseases according to Yancik R *et al.*, women with 2 or more comorbidities seen are 45% in 60-69 age group. 61% in 70-79 and 70% in 80 years and above [7]. Our study supports Yancik R *et al.* study. Incidence of comorbidities increases with age & it also influence the treatment modality in elderly.

In our study, family history of breast cancer is present in 8% of the population. Family history of breast cancer present in 20% of the population. Incidence of positive family history is less in elderly patients.

In our study, 88% of the patient underwent modified radical mastectomy and only 12% underwent breast conservative surgery with axillary lymph node dissection.

According to Holmes C.E *et al.*, Data suggests elderly women are less likely to be offered or receive breast conservative surgery [9] with 25% of women aged 80 or older receiving breast preservation compared with 42% of women under 50 years of age. Our study supports these data.

Surgical options and tolerability of surgery in elderly patients are important issues.

According to burgeoning literature surgery in healthy elderly women is safe and without additional risk compared with younger counterparts. Breast conserving surgery like lumpectomy, axillary dissection, breast irradiation is equal in efficacy to extensive surgical options with no difference in overall 20year survival.

In our study, 10% of the patients received combination of adjuvant radiotherapy and chemotherapy and 8% received radiotherapy.

Radiation therapy is generally recommended for all women who receive breast conservation surgery and in post-mastectomy women with 20% or more probability of local recurrence. Common side effects of radiotherapy are skin hyperpigmentation, erythema and mild fatigue [9, 10].

Most elderly patients do not go for radiotherapy due to fear of side effect and intolerability.
In our study group, 46% of the patients took adjuvant chemotherapy. There is significant improvement in disease recurrence and survival with adjuvant chemotherapy. Short term toxicities like nausea, emesis, mucositis, alopecia and neutropenia continue to play a major role in decision making.

Conclusion

Breast cancer is the most common cancer in women worldwide. Age being important risk factor for the development of breast cancer, incidence increases with age. As with significant improvements in medical treatment, more women are surviving longer. Elderly patients encounter special management problems as a result of old age and presence of comorbidities.

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