Clinical Characteristics of Breast Cancer Patient: A Retrospective Analysis

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ABSTRACT

Introduction: Patients with breast cancer have long been thought to have poorer prognosis. It is the 2nd commonest cancer in women in Nepal. The aim of this retrospective study was to conduct a review of data of patients who underwent treatment at Patan Academy of Health Sciences(PAHS) to ascertain the clinico-epidemiological pattern.

Methods: The case report of all patients diagnosed to have breast cancer were examined for age, risk factors, symptoms and clinical findings, site of primary tumor and extent of disease, operative management & histopathological results.

Results: Among 50 cases, all were females(100%). Mean age of presentation was 42yrs. Main presentation was breast lump, among them 20(40%) had pain and 6(12%) had nipple discharge & 16(32%) had ipsilateral axillary lump. Mean duration of symptoms was 4 months. Mean size of tumor was 4x5 cm an main location was upper outer quardant (32.4%). Overlying skin was involved in 22(44%) and chest wall fixation was seen in 16(32%). Out of 50 case, 38(76%) received adjuvant treatment. Fourteen patient with locally advanced breast cancer received neoadjuvant chemotherapy first. Histopathologically infiltrating ductal carcinoma was seen in 94%, medullary carcinoma in 3%, lobular carcinoma in 2%, lymphoma in 1%.

Conclusion: In our study, breast carcinoma was prevalent in younger age group commonly in middle class population. Most patients who presented in locally advanced stage were due to lack of awareness and inadequate health care services. Complete treatment was relatively unsuccessful because of poor follow up.

Key Words: breast cancer, breast conserving surgery, modified radical mastectomy

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INTRODUCTION

Breast cancer accounts for 6% of all cancers in Nepal.[1] It is the 2nd most common cancer in women in Nepal and its incidence is on the rise as compared to other developing countries.[2]There is a marked geographical variation in the incidence of breast carcinoma worldwide. In the West (developed countries), the incidence of breast cancer is more than 1000 per million whereas in developing countries it is low (less than 200 per million women). However, cancer mortality is higher in developing countries than in the developed countries.[3] The disease is much advanced at presentation due to a delay in diagnosis, possibly because of lack in easy access to medical services & lack of awareness. Due to delay in diagnosis, outcome is poor as compared to developed countries.[4]

METHODS

All the patients who underwent admission and treatment at PAHS from Jan 2009 to Dec 2013(5 years) with the diagnosis of breast cancer were analysed retrospectively. There were 57 breast cancer cases during this period. Complete data could not be retrieved from 7 patients and hence were excluded from the study. In the remaining 50 cases, data were analysed for age, risk factors, symptoms & clinical signs, stages of disease and neoadjuvant chemotherapy. However adjuvant therapy details were incomplete due to lack of follow up. Investigations included basic biochemical analysis, Chest X-ray, USG abdomen & FNAC/Trucut Biopsy.

RESULTS

Out of 50 cases, the most commonly affected age group was 41-50 years (38.22%) followed by 31-40 years (28.62%). The youngest patient was 23 years and the oldest was 76 years. The mean age of presentation was 42 years. Thirtysix patients were premenopausal and 14 patients were post menopausal. Fourty eight patient attend their menarche at the age range of 13-17 years and most (84%) of them were multiparous. The most common age group of first child birth was 18-22 years. Fourtyfour women had first child at this age range, while 6 had their first child after 22 years. Breast feeding history was obtained from all the patient.

Positive family history of breast cancer was seen in 6 patient(12%)in their first degree relatives without mortality till date, however contralateral breast cancer were not seen in any of the patient. Smoking history was seen in 26(52%)patients and alcohol intake in 10(20%) patient. Majority of our patient were from middle class background(80%).

All patients presented with breast lump. Pain was seen in 20(40%), nipple discharge in 6(12%) and ipsilateral axillary lump in 14(28%). Duration of symptoms was 1 to 9 months with mean duration of 4 months. Mean size of tumor was 4x5 cm an main location was upper outer quardant (32.4%) followed by lower inner quadrant(27.6%), lower outer quadrant(20%) and upper inner quadrant(20%). Overlying skin was involved in 22(44%) and ulceration and nipple retraction in 12% each. Chest wall fixation was seen in 16(32%). Breast cancer involved the right and left breast in 30 and 20 cases respectively. Locally advanced cancer was more common in the patient with ipsilateral axillary swelling with overlying skin changes in 28(56%).

Locally advanced breast cancer (stage 3a & 3b) patient were subjected to CMF(cyclophosphamide, methotrexate, 5-flurouracil) based neoadjuvant chemotherapy and subsequently followed by modified radical mastectomy. Where as 22(44%) of early breast cancer(stage 1 & 2) were directly subjected to MRM and among them 5(10%) of the patients who intend to preserve breast were subjected to breast conserving surgery (BCS) after counselling in regard to post operative radiotherapy. FNAC was the major modality to diagnose cancer in 42(84%) patient and Trucut biopsy in 8(16%). Mammography was done in 31 patients. Breast ultrasound was added to know and biopsied any suspicious lesion and to rule out contralateral breast lesions. All patients underwent chest x-ray. CT scan was done in patient suspected to have locally advance disease. Modified radical mastectomy(MRM) was done in 39 case followed by breast conserving surgery(BCS) in 8 cases & wide local excision in 3 cases.

Table 1. Risk factors

nulliparous	8(16%)
multiparous	42(84%)
age of menarche (13-17 years) (<13 years) (>17 years)	48(96%) 1 (2%) 1(2%)
age of first child birth 18-22 years >22 years	44(88%) 6(12%)
breast feeding	50(100%)
family history of breast cancer	6(12%)
history of contralateral breast cancer	0
smoking history	26(52%)

Table 2. Tumor stage

Stage	TNM group	Number	Percentage(%)
1	T1N0M0	0	0
2a	T1N0M0	6	27.27
	T2N0M0	10	45.45
2b	T2N1M0	4	18.18
	T3N0M0	2	9.09
3a	T2N2M0	8	28.57
	T3N1M0	9	32.14
3b	T4N1M0	3	10.71
	T4N2M0	8	28.57

DISCUSSION

There is paucity of data with respect to the actual prevalence of breast cancer in Nepal. There is also a paucity of information regarding the treatment outcome of our breast cancer patients. The median age of presentation ranges from 41-50 years in our study, significantly lower than the western figure, but similar to other Nepalese figure. Manoj et al[5] reported 35.98% of their patient had the same age range. In an early breast cancer study in India the median age was 47 years as reported by Raina et al.[6]

Ironically locally advance breast cancer was seen relatively higher than early stage in our study when compared to series from west. This probably is the trend in developing country like ours, possibly because of lack of awareness and ineffective screening programme.[7] There are some known risk factors for breast cancer in literature, we found most of them do not exactly correlate in the women of this part of world. Early menarche, late menopause, low parity, older age at first live birth, use of hormonal contraceptives and absent of breast feeding had minimal influences on the etiology of breast cancer in these patients. Clinical assessment with aid of FNAC was shown to be the main diagnostic tool in this study, which probably is consider ideal initial approach for breast lump. However compared to previous report from valley where diagnosis was made on breast biopsy, in our series FNAC was diagnostic in 84% cases.[5] Regarding treatment, most of our patient were subjected to MRM with axillary clearance. Breast conserving surgery is not practice widely as compared to other part of world, due to lack of facility for radiotherapy as well as patients ignorance contrary to cosmetic appearance.[8]

Lack of fund & proper health policy and inability of patients to recieve standard chemotherapeutic agent and poor follow up may be the reason for inadequate documentation of adjuvant systemic therapy for our breast cancer

CONCLUSION

Breast cancer registry and nationwide survey of breast cancer including the clinical and epidemiological data is mandatory to institutionalize the proper treatment policy and guidelines in our country. Focus on screening programme and breast self examination should be aggressively generalise in high risk women so as to detect breast cancer in early stages and avoid unnecessary morbidity and mortality.

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