

# Outcome analysis of breast cancer patients treated at Nepal Medical College

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## ABSTRACTS

Breast carcinoma is second most common malignancy among women in Nepal and is also still a killer carcinoma in our context. We are encountering with more cases of breast cancer, may be due to increase number of cases because of life style modification or due to more diagnostic facilities available in the country. Yet we most often encounter more advanced stage of breast carcinoma. In our study we had total of 21 patients who suffered from breast carcinoma. Among those patients most were elderly with mean age of  $54.33 \pm 11.25$  years. Among 21 patients, 13 patients were either of locally advanced type or with advanced breast carcinoma with metastasis. In our institution these patients were offered evidence based treatment as per their requirement. Since most of these patients are unaware of self breast examination and hence presented lately. Even though they were managed properly, 1 patient had local recurrence and 4 patients later presented with distant metastasis.

**Keywords:** Breast Carcinoma, self breast examination, modified radical mastectomy, recurrence.

## INTRODUCTION

Breast Cancer is the second most common malignancy among women in Nepal. It is more common in premenopausal group. Breast cancer continues to increase in incidence due to lifestyle modification among Nepalese women.<sup>1,2</sup> Hence it gives major burden to the clinicians who are involved in care of breast diseases. Identification of factors responsible for increasing chance of breast cancer developing is important for clinicians who care for women. The factors are age of menarche and menopause, parity, age of first birth, breast feeding, exogenous hormone use, alcohol consumption, positive family history etc. Breast cancer is rare in persons younger than 20 years, and cases in women younger than 30 years constitutes less than 2% of the total cases. Thereafter, the incidences increases to 1 in 93 by age 40, 1 in 50 by age 50, 1 in 24 by age 60, 1 in 14 by age 70, and 1 in 10 by age 80.<sup>3,4</sup>

Breast cancer management involves either modified radical mastectomy or breast conservation surgery followed by adjuvant chemo radiotherapy with hormonal therapy depending upon the pathological state and hormone receptor positivity of tumor. The National Surgical Adjuvant Breast and Bowel Project (NSABP) study reported overall survival benefit of 45-49% among women treated with mastectomy and 44.48% survival benefit for those who underwent lumpectomy and breast irradiation.<sup>5,6</sup> Recently breast conserving surgery is gaining more popularity for early stage tumors. Neoadjuvant chemotherapy is used to make non operable tumors operable but its role is more in improving breast conservative surgery rather than to increase survival.<sup>7,8</sup> In the context of Nepal the scenario is

bit different as many patient when reach to the clinician, most of them are at advance stage. This may be due to poor socioeconomic status and due to lack of education. Many of our patients are ignorant about self breast examination hence we lack the opportunity to pick up early breast cancer. This will ultimately result is poor surgical outcome regarding survival benefit of these patients.<sup>9</sup> In Nepal Medical College, most of the breast cancer patients are elderly with advance stage tumor. Hence this study was done to analyze the outcome of treatment of those patients who presented to us with breast cancer.

## MATERIALS AND METHODS

A prospective study was done at Nepal Medical College Teaching Hospital (NMCTH), Department of surgery for analyzing outcome of treatment of breast cancer patients. All the breast cancer patients who presented to us were investigated thoroughly and preoperative staging was being done. Those early stage operable breast cancer patients were treated with either modified radical mastectomy or simple mastectomy. The inoperable advanced case was treated with toilet mastectomy. Post operatively the patients were offered chemotherapy and hormonal therapy according to histopathology reports and requirement. These patients were then followed as per protocol of breast cancer management.

## RESULTS

In our study 21 patients were operated for breast carcinoma at NMCTH from January 2008 to November 2011. The mean age of our patients was Age- $54.33 \pm 11.25$  years (Fig.1).

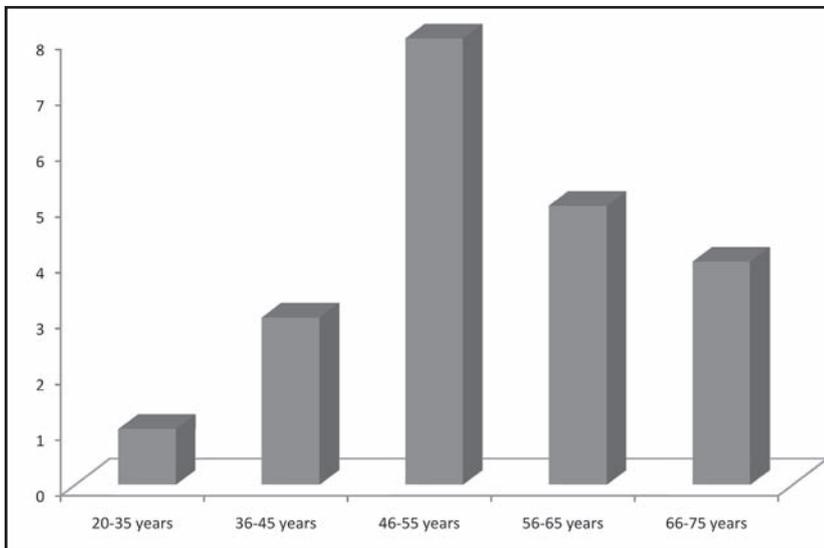


Fig. 1. Age distribution

The patients were diagnosed as breast carcinoma by using triple assessment (FNAC, Ultrasonography of breast/Mammogram and clinical assessment). In our study, there is 1 case which was reported as benign breast disease by FNAC was later reported as ductal cell carcinoma in histopathology. She was operated on the basis of ultrasonographic finding and clinical suspicion.

In our patients right breast were affected in 12 cases and left in 9 cases. Among these patients 16 patients had lump over upper outer quadrant of breast, 4 in upper inner quadrant and one in central region. Two of these women were nulliparous, 9 had single offspring and 10 were multiparous.

These patients were operated according to their preoperative assessment. Modified Radical Mastectomy was done in 16 patients. Among these 16 patients 8 patients developed lymphoedema of the arm and forearm which were managed by compression bandaging and arm elevation. Four of these patients were treated with simple mastectomy and one with simple toilet mastectomy.

We had send all the operated specimens for histopathological examination and are reported as shown in Fig. 2.

There were 8 cases of ductal carcinoma with nodes negative, 7 patients with ductal carcinoma with nodes positive, 4 patients with muscle infiltration with nodes positive, one patient with undifferentiated neoplasm with nodes positive and one inflammatory carcinoma.

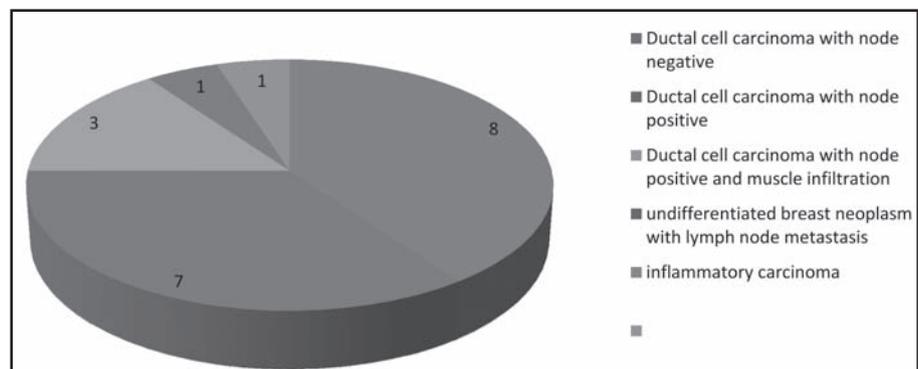


Fig. 2. Histopathology reports

On discharge of the patients 20 out of 21 patients were prescribed Tamoxifen 20 mg twice daily. Twelve patients were referred to Bhaktapur cancer hospital for Chemotherapy. We are doing routine follow up of the patients as 4 monthly for first 2 years and then 6 monthly. Till date 10 patients are doing quite well with no complaints, 1 patient got local recurrence, 5 patient lost follow up, 4 patients later presented with metastasis and one died due to pleural metastasis after doing toilet mastectomy. Among those with metastasis 2 got malignant pleural effusion, one got malignant pleural and pericardial effusion and one with malignant ascitis.

### DISCUSSION

In the prospective study carried out at department of surgery, NMCTH from July 2008 to October 2011. This study was being conducted to assess the outcome of our breast cancer management and also to find out why most patient present in advanced stage carcinoma. We had 21 patients with breast carcinoma. These patients were treated with either modified radical mastectomy, simple mastectomy or toilet mastectomy as per preoperative assessment of the patients. All the patients were diagnosed as breast carcinoma by triple assessment using USG breast/Mammogram, FNAC and clinical assessment. In our case one patient for whom FNAC was reported as benign breast disease was operated on clinical ground. She underwent simple lumpectomy and was later reported as infiltrating ductal cell carcinoma. She underwent revision surgery with modified radical mastectomy. In our study we got 1 case of local recurrence whom revision surgery done and was referred to Bharatpur cancer hospital for radiochemotherapy. Similarly 4 cases later presented with distant metastasis. Among them 2 got malignant pleural effusion, one got malignant pleural and pericardial effusion and one with

malignant ascitis. 2 of these patients are already expired and 2 are under chemotherapy.

We also accessed whether our patients are aware of self breast examination. On questionnaire 5 of our patients are aware of self breast examination and they detected the lump early. One of the patient was our medical staff and presented very early but the tumor was very aggressive with had already infiltrated the muscle. She underwent Modified radical mastectomy but she presented with metastasis after 9 months and was expired. On correlating those with self breast examination with their age we found that the younger the age they are more aware and so present early to the clinician. They got good prognosis after evidence based management. There is an article published by Antony B Miller where he found that the self breast examination if followed by clinical breast examination by physician detect early breast carcinoma and hence reduces mortality.<sup>10</sup>

In a country like Nepal where most patients present as advance breast cancer ,there is role of educating the public regarding self breast examination followed by clinical breast examination by clinicians. This helps to detect early stage breast cancer and ultimately improves outcome regarding recurrences, metastasis and the survival. In our study as well most of our patients were elderly who were unaware of self breast examination. They presented to us in advanced stage. We managed them as per guidelines of breast cancer management with modified radical mastectomy along with hormonal and chemotherapy. Most of our patients are doing quite good but yet we are unable to meet international standard of management with prolong disease free survival.

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