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Clinical Presentation and Management of Breast Lump in Sylhet M.A.G Osmani Medical College and Hospital- A Study of 100 Cases

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Abstract **Case Report**

A breast lump is a growth of tissue that develops within breast. A breast lump is often interchangeably described as a mass, swelling, thickness or fullness. The present cross sectional study was to find the clinical presentation and management of breast lump patient. The study was conducted in the Department of Sylhet MAG Osmani Medical College Hospital between July 2017 to December 2019. The patients who presenting with breast lump were study population and patient with male breast lump and breast abscess were excluded from the study. The mean ages at diagnosis, menarche and menopause were 39.1±15.6, 12.4±1.1, 41.9±10.5 years respectively. The average time lapsed between marriage and 1st child birth was 4.6±2.2 years. Out of 100 patient majorities (84%) patients were married, 8% had family history of breast cancer, 9% had history of taking oral contraceptives. All of the patients complained of swelling in the breast, thirty-four patients complained pain in the breast, twenty-four discharge from the nipple and seven patients complained fever. Half of the patients' had location of swelling in upper outer quadrant of breast. The mean size of swelling was 4.0±1.5 cm and the lowest and highest size of swelling was 1 cm and 10 cm respectively. Fifty-four percent of patient had firm swelling, forty-one percent had hard and five percent had soft swelling. Two percent had fluctuation in the swelling. Four percent ulceration of breast, two percent peau-d-orange, six percent with fixity of skin and two percent fixity to the underlying structures. Regarding lymph node status twenty-two percent had axillary and four percent had supraclavicular lymphadenopathy. Regarding characteristics of nipple thirteen percent patient had tender nipple followed by eight percent had retracted, four percent had ulcerated and only two percent had protruded nipple. Nearly forty percent patients had blood stained discharge. Out of hundred patients four percent had a history of jaundice, four percent hepatomegaly, three percent cough and two percent hemoptysis suggesting distant metastasis. FNAC of swelling suggested fifty-four percent had benign lesions, forty-three percent malignant and three percent other suspicious lesions. Only four percent patient had hepatic involvement detected by ultrasonography. Two percent had evidence of metastasis detected by X-ray chest and two percent had positive bone scan. Most of the patients (70%) received operative treatment, twenty patients received conservative treatment and ten received diverse treatment. Approximately forty-four percent patients received excision biopsy, 23.8% simple mastectomy, 17.5% simple mastectomy with axillary clearance followed by radio/chemo/hormonal therapy and 2.5 % received enucleation. Histopathological examination revealed thirty-one patients had fibro adenoma, twenty-five patients' invasive ductal carcinoma and nine patients had invasive lobular carcinoma. About eighteen percent had poorly differentiated cell type, 38.2% moderately and 44.1 percent well differentiated. One third (33.3%) was in stage II followed by 23.8% in stage I, 19% in stage IV and 14.3% in stage III b and 9.5% in stage III a. Among the 100 patients 56 had benign and 44 had malignant breast disease.

Keywords: Breast lump, hepatomegaly, ulceration, simple mastectomy.

INTRODUCTION

A breast lump is a growth of tissue that develops within breast. A breast lump is often interchangeably described as a mass, swelling, thickness or fullness. A breast lump can feel distinct and have definite borders or it could feel more like a general area of thickened tissue in beast. Other breast changes accompanying a breast lump such as redness of skin, distension, dimpling or pitting, breast asymmetry, breast pain, nipple inversion or unusual nipple discharge. It is the most common cancer in the women in western world and the most common cause of death in women between 35 to 55 years.

Breast lump is the clinical presentation of numerous breast disorders ranging from innocent benign cyst to malignant neoplastic lesions. So distinction of benign to malignant is of paramount importance for patient care and management [1].

The age Standardized incidence and mortality rate for breast cancer in England and Wales is one of the highest in the world with 13000 deaths per years [2]. Recent measures to address this problem include the health of the nation targets for reducing mortality through screening, guidelines issued to purchasers of cancer services, guidelines issued to GPs for referring patients with breast symptoms and additional money allocation to health authorities to aid the rapid diagnosis of breast cancer [3]. The most common breast problems for which women consult with physician are breast pain, nipple discharge and palpable mass. Most women with these complaints have benign breast disease. Breast pain alone is rarely a presenting symptom of cancer and imaging studies should reserve for use in women who fall within usual screening guidelines [4].

A nipple discharge can be characterized by physiologic or pathologic based on the findings of the history and physical examination. A pathologic discharge is an indication for terminal excision [5]. A dominant breast mass requires histologic diagnosis. A breast cyst can be diagnosed and treated by aspiration. The management of a solid mass depends on the degree of clinical suspicion and the patient's age [1].

Report suggest virtually every woman with a breast lump, breast pain or discharge from nipple fears that she has breast cancer. The anxiety that results is made of three components: the unknown course of the diseases, the threat of mutilation and the fear of death: all these compounded by social and cultural norms among certain groups often preventing women from seeking early medical advice. In recent years specially in the west public awareness and media publicity about self-examination and screening and the possible advantages of early treatment have encouraged earlier presentation, which of course is not without disadvantages; the psychological consequences of false alarms and false reassurance cannot be ignored together [6]. Unfortunately the majority of the sufferers in this part of the world is far from being aware of the disease process and thus present only when it is too late. This is especially applicable in case of breast cancer.

OBJECTIVE

Aim of this study is to find the clinical presentation and management of breast lump patient.

MATERIALS AND METHODS

This cross sectional study of 100 patients was to find the clinical presentation and management of breast lump patient. The study was conducted in the Department of Sylhet MAG Osmani Medical College Hospital between July 2017 to December 2019. Study protocol was approved by local ethical committee. Details history of each patient was included in this study with special attention given to patients' age, parity, menstrual history, menopausal history, use of contraceptive pill, past history of breast lump, family history of breast cancer etc. General physical and local examination of breast lump was performed following standard protocol. In all cases relevant necessary investigations were done like FNAC, true cut biopsy, incisional and excisional biopsy, USG of breast and abdomen. Bone scan and CT scan of brain were performed where they deemed necessary. The treatment outcomes of various types of breast lump were evaluated.

Statistical Analysis

The test statistics used analyze the data were descriptive statistics, Chi-square test and Student's t-Test. The categorical data were presented as frequency with corresponding percentage and were compared among groups using Chi-square test, while quantitative data were expressed as mean and SD (Standard Deviation) with the help of descriptive statistics. For all analytical tests, the level of significance was set at 0.05 and $P<0.05$ was considered significant. The summarized data were presented in the form of tables and charts.

RESULTS

The patients who presenting with breast lump were study population and patient with male breast lump and breast abscess were excluded from the study. The study included 100 patients age ranged between 15 and 65 years. The mean ages at diagnosis, menarche and menopause were 39.1±15.6, 12.4±1.1, 41.9±10.5 years respectively. The average time lapsed between marriage and 1st child birth was 4.6±2.2 years. Out of 100 patient majorities (84%) patients were married, 8% had family history of breast cancer, 9% had history of taking oral contraceptives. All of the patients complained of swelling in the breast, thirty-four patients complained pain in the breast, twenty-four discharge

from the nipple and seven patients complained fever. Half of the patients' had location of swelling in upper outer quadrant of breast. The mean size of swelling was 4.0±1.5 cm and the lowest and highest size of swelling was 1 cm and 10 cm respectively. Fifty-four percent of patient had firm swelling, forty-one percent had hard and five percent had soft swelling. Two percent had fluctuation in the swelling. Four percent ulceration of breast, two percent peau-d-orange, six percent with fixity of skin and two percent fixity to the underlying structures. Regarding lymph node status twenty-two percent had axillary and four percent had supraclavicular lymphadenopathy. Regarding characteristics of nipple thirteen percent patient had tender nipple followed by eight percent had retracted, four percent had ulcerated and only two percent had protruded nipple. Nearly forty percent patients had blood stained discharge. Out of hundred patients four percent had a history of jaundice, four percent hepatomegaly, three percent cough and two percent hemoptysis suggesting distant metastasis. FNAC of swelling suggested fifty-four percent had benign lesions, forty-three percent malignant and three percent other suspicious lesions. Only four percent patient had hepatic involvement detected by ultrasonography. Two percent had evidence of metastasis detected by X-ray chest and two percent had positive bone scan. Most of the patients (70%) received operative treatment, twenty patients received conservative treatment and ten received diverse treatment. Approximately forty-four percent patients received excision biopsy, 23.8% simple mastectomy, 17.5% simple mastectomy with axillary clearance followed by radio/chemo/hormonal therapy and 2.5 % received enucleation. Histopathological examination revealed thirty-one patients had fibro adenoma, twenty-five patients' invasive ductal carcinoma and nine patients had invasive lobular carcinoma. About eighteen percent had poorly differentiated cell type, 38.2% moderately and 44.1 percent well differentiated. One third (33.3%) was in stage II followed by 23.8% in stage I, 19% in stage IV and 14.3% in stage III b and 9.5% in stage III a. Among the 100 patients 56 had benign and 44 had malignant breast disease.

Table I compares the baseline characteristics between benign and malignant group. All the baseline variable like age at menarche, age at menopause, marital status, parity, time lapsed between marriage and 1st child birth, family history of breast cancer and use of oral contraceptives were statistically significant between groups as evident by P<0.05.

Table I: Comparison of baseline characteristics between groups

Baseline Characteristics	Benign	Malignant	P-value
Age at menarche	12.7±0.9	11.9±0.9	<0.001
Age at menopause	38.0±0.0	42.3±10.8	0.013
Marital Status			
Married	40 (71.4)	44 (100.0)	<0.001
Unmarried	16 (28.6)	00	<0.001
Parity			
Nulliparous	26 (48.1)	10 (22.7)	<0.001
Parous	20 (37.0)	8 (18.2)	<0.001
Multipara	8 (14.8)	26 (59.1)	<0.001
Time lapsed between marriage and 1st child birth	3.4±1.6	5.5±2.2	<0.001
Family history of breast cancer	1(1.8)	7(15.9)	0.012
Use of oral contraceptive	2(3.6)	7(15.9)	0.032

DISCUSSION

Benign Breast Diseases are 10 times more common than breast cancer in West. Reassurance following exclusion of cancer is the keystone of management for majority of cases. Due to lack of education, the women disregard the lump. Fibroadenoma is the commonest benign breast lump in young females: the patients want removal because of social reason and fear of malignancy. Some of the findings presented in the earlier chapter need to be discussed further to come to a conclusion [31].

The mean ages at diagnosis, menarche and menopause were 39.1±15.6, 12.4±1.1, 41.9±10.5 years respectively and the maximum and minimum values were 15-65 years, 10-15 years and 38-90 years respectively. Aisha *et al.,* reported in his study majority of patients (78%) were married, 80% patients had family history of breast cancer and 19% used OCP [32]. On the other hands in this study 84% were married, 8% had family history of breast cancer, 9% had history of taking oral contraceptives [32].

Almost all the patients (93%) complained swelling in the breast [32] in this study all of the patients complained of swelling in the breast, thirty-four patients complained pain in the breast, twenty-four discharge from the nipple and seven patients complained fever. Half of the patients' had location of swelling in upper outer quadrant of breast. The mean size of swelling was 4.0±1.5 cm and the lowest and highest size of swelling was 1 cm and 10 cm respectively. Fifty-four percent of patient had firm swelling, forty-one percent had hard and five percent

had soft swelling. Two percent had fluctuation in the swelling. Four percent ulceration of breast, two percent peau-d-orange, six percent with fixity of skin and two percent fixity to the underlying structures. Regarding lymph node status 54% patients had lymphadenopathy [32]. Whereas this study shows twenty-two percent had axillary and four percent had supraclavicular lymphadenopathy.

Regarding characteristics of nipple thirteen percent had retracted nipple [33]. In this study thirteen percent patient had tender nipple followed by eight percent had retracted, four percent had ulcerated and only two percent had protruded nipple. Nearly forty percent patients had blood stained discharge. Out of hundred patients four percent had a history of jaundice, four percent hepatomegaly, three percent cough and two percent hemoptysis suggesting distant metastasis.

FNAC of swelling suggested fifty-four percent had benign lesions, forty-three percent malignant and three percent other suspicious lesions. Only four percent patient had hepatic involvement detected by ultrasonography. Two percent had evidence of metastasis detected by X-ray chest and two percent had positive bone scan. Most of the patients (70%) received operative treatment, twenty patients received conservative treatment and ten received diverse treatment. Approximately forty-four percent patients received excision biopsy, 23.8% simple mastectomy, 17.5% simple mastectomy with axillary clearance followed by radio/chemo/hormonal therapy and 2.5 % received enucleation. Histopathological examination revealed thirty-one patients had fibro adenoma, twenty-five patients' invasive ductal carcinoma and nine patients had invasive lobular carcinoma. About eighteen percent had poorly differentiated cell type, 38.2% moderately and 44.1 percent well differentiated. One third (33.3%) was in stage II followed by 23.8% in stage I, 19% in stage IV and 14.3% in stage III b and 9.5% in stage III a. Among the 100 patients 56 had benign and 44 had malignant breast disease.

In another study Aisha *et al.*, defined 294 (58.8%) breast lump as benign which is similar to our study but quite less number than the study conducted by Adesunkanami *et al.*, [34] in Nigeria where 87.2% patients came up with benign breast lump. In our study out of total cases studied benign breast lumps were common.

CONCLUSION

This small scale study conducted did not reflect the total spectrum of breast disease in the whole population. Results of this study give an idea about the incidence of various types of breast lesions in our country. The findings of the study suggest early detection and prompt treatment. This can be achieved by proper health education to increase awareness and employing screening program by regular physical examination and mammography of the people at risk.

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