Pattern of Breast Cancer Presentation

Faryal Azhar, Tausief Fatima, Tabinda Aqsa, Usman Qureshi, Gohar Rasheed, Jahangir Sarwar Khan.
Department of Surgery Unit I, Holy Family Hospital and Rawalpindi Medical College

Abstract

Background: To study the various types of breast cancer presenting in local hospital to ensure better facilities, early diagnosis and better treatment options

Methods: In this descriptive study all breast cancer patients, over a period of two years were included. Triple assessment of patients done for diagnosis and treatment given all were included in data.

Results: Total number of patients who presented were 1982. Benign breast disease patients were 1746 (88.0%). Breast cancer were 236(11.90%). Five hundred and two mammographies were done, 197 were BIRAD 5. Preferably confirmation was done through trucut biopsy (35), FNAC was done in 74 and where needed incisional biopsy in fungating tumors (n=15) and excisional biopsy where in spite of all modalities diagnosis was not confirmed (n=11). Age varied from 24 to 75 years. Majority (126) were in stage 3. Forty two patients received neoadjuvant chemotherapy. Modified radical mastectomy (n=114), Breast conservation (n=13) and simple mastectomy (n=17) were performed .Receptor status was dtermined.

Conclusion: The most common stage of presentation is stage 3. Such patients need down staging and then surgery. They required proper counseling and support for their treatment. Females usually present late due to domestic issues. Early diagnosis, treatment and full support is required to treat breast cancer. This study will help to provide better facilities for early diagnosis and treatment.

Key Words: Breast Cancer, Triple Assessment, Modified Radical Mastectomy.

Introduction

With 1 million new incidents in the world each year, breast cancer is the commonest malignancy in women and encompasses 18% of all female cancers.[1] In the United Kingdom, the age standardised incidence and mortality is the maximum in the world. The incidence among women aged 50 approaches two per 1000 women per year, and the disease is the single commonest cause of death among women aged 40-50, accounting for about a fifth of all deaths in this age group. [1] There are more than 14 000 deaths each year, and the incidence is increasing particularly among women aged 50-64, probably because of breast screening in this age group. [2]

Of every 1000 women aged 50, two will recently have had breast cancer diagnosed and about 15 will have had a diagnosis made before the age of 50, giving a prevalence of breast cancer of nearly 2%. [1-4] In an initial report, we suggested that such a major change in breast-cancer incidence occurred in 2003 in the United States. Compared to the 1990s when we saw an increase in the annual age adjusted incidence of breast cancer by an average of about 0.5% per year, the rise that was particularly evident among women who were 50 years of age or older.[4] With this finding of fluctuation in incidence of carcinoma in breast it is important to find the current trends in our society.

Changes in reproductive factors, use of menopausal hormone-replacement therapy, mammographic screening, environmental exposures, and diet have all been proposed to explain the trend. Of these factors, only the use of hormone replacement therapy altered considerably between 2002 and 2003. So it is most important to study incident and associated factors in patients with carcinoma breast. [6-10]

Despite the fluctuations in incidence research shows that as an outcome of changing experiences to reproductive and nutrition related factors over time women are at high risk of breast cancer. [11] Incidence rates is rising in most countries and areas of the world in the past few decades. The most rapid upsurges are seen in developing countries, where breast cancer risk has previously been low relative to industrialised countries.[12]Increasing tendencies in developing zones are often considered the result of the 'westernisation' of lives, an ill-defined replacement for changes in factors such as dietary habits, childbearing and exposure to exogenous oestrogen, towards a dispersal closer in report to that of women in industrialised countries. [12]

Many early breast carcinomas are asymptomatic, especially when discovered during a breast screening program. [13] Larger tumors may present as a painless mass. The breast cancer presentation is usually late in our setup. There are various ways of presentation of breast cancer usually with painless lumps, hard fixed masses, ulcerated or fungating masses. [14] The worst

presentation is with bone pain, fracture, jaundice and breathing difficulties. Triple assessment is used for diagnosing breast cancer, so that a diagnosis can be obtained with minimum degree of invasiveness. The aims of evaluation of a breast lesion are to judge whether surgery is required and, if so, to plan the most appropriate surgery.

Patients and Methods

In this descriptive and cross-sectional study all breast cancer patients , over a period of two years were included. Triple assessment of patient was done for diagnosis and treatment . Cases with benign breast diseases were also noted to assess ratio of malignant to benign disease that presented in breast clinic. Data was collected regarding the number of biopsies done.Number of patients in different stages were recorded. Surgeries done for breast cancer.Complications due to surgeries noted.Histopathology types weree assessed. Number of patients sent for down staging and the number who left against medical advice were recorded.

Results

Total number of patients presented were 1982. Benign breast diseases were n=1746. Breast cancer were n=236 (Table 1). Five hundred and two mammography were done out of which 197 were BIRAD 5. Preferably confirmation was done with Trucut biopsy (n=135). FNAC was done in 74 patients. Invasive ductal carcinoma was commonest (Table 2). For 15 patients with fungating tumors incisional biopsy was done. Modified Radical mastectomy was the commonest procedure performed (Table 3)Age groups presented was from 24 to 75 years. N=8 in stage 1. Commonest stage was 3(Table 4).

Table. 1: Breast - Benign and malignant disease

Diseases	Number of patient
Benign breast diseases	236
Malignant breast disease	1746

Table.2: Number of different types of malignant cancers.

Types of carcinoma	Number of patients
Lobular carcinoma	5
Invasive ductal carcinoma	205
Tubular variety of invasive ductal cancer	23
Medullary carcinoma	3

Forty two patients were sent to NORI for down staging. Modified radical mastectomy(n=114), breast

conservation (n=13) and simple mastectomy (n=17) were the common surgical procedures performed .Commonest complication was mostly seromas (n= 15).Thirty nine patients left against medical advice.

Table 3. Carcinoma Breast- Operation performed.

Name of operation	Number of operation
MRM	114
WLE	11
BCS	13
Mastectomy	17

MRM, modified radical mastectomy. WLE, wide local excision. BSC, Breast conservative surgery.

Table. 4. Carcinoma Breast- Stages of Disease

Carcinoma breast	Number of patients in different stages
Stage 1	8
Stage 2	86
Stage 3	126
Stage 4	16

Discussion

Cancer of the breast is the most common cancer in both developing and developed countries. [15,16] In Pakistan deficiency in cancer registries at national level, lack of awareness, limited access to facilities and insufficient breast clinic services attribute to the delay in diagnosis and increase mortality rate.[17]   Recent studies concluded that more than half of the patients who visited breast clinics suffer from benign diseases. As in our study, 88% are benign and 12% are malignant. Breast lump is a very sensitive issue for the patient so a reliable, non invasive and prompt diagnosis helps to lessen the associated anxiety and leads to early definitive treatment. In conclusion, TTS is an accurate and least invasive diagnostic test based on which definitive treatment can be initiated.[18] Diagnosis in our study was much accurate and easier with triple assessment i.e, physical examination, mammography and biopsy.[19] Mammography is an important screening tool which can effectively detect breast cancer earlier before it becomes palpable on breast self-examination.[20]   Ultrasound is investigation of choice in young patients < than 35 years of age in our study.[21]   After confirmation of breast cancer, mammography was done in all young patients. Study in Iran , in 1500 patients, the mean age at diagnosis was 46.0 + 12.0 (SD)   years. [22] Compared to our study mean age group was 45 and most common age groups presented were between 35 to 45 years of age.

Most patients in our study presented in stage 3 compared with study in Nigeria.[23] This study showed that most (62.1%) of the patients presented with advanced disease commonly with Manchester Stage III 48(46.6%). This study also showed that invasive ductal carcinoma was the most common (82.5%) histological type followed by Medullary carcinoma (5.8%). Although the grading was not specified, other researchers have also found invasive ductal carcinoma occurring most commonly.

Breast cancer is the most frequent cancer of women in Pakistan with the majority presenting with stage III or IV lesions at initial diagnosis. Patient and health system related factors are well known determinants of delay in presentation and diagnosis.[24] Similar with us the most common stage at presentation was stage 3.The patients sent for down staging were 42 and only 3 patients came back. Rest either never came back or went to some hakim or faith healer and local treatment. Our study reveals that the late presentation of breast carcinoma is associated with poor socio-economic status, lack of access to proper health care facility and poor literacy rate.

Aziz S et al found delay in diagnosis was more pronounced in patients from low socio-economic strata. [6] They noted ignorance, poverty, illiteracy, lack of resources, disease stigma, use of alternate medicine and poor access to health care facilities were factors as key areas for delay in the diagnosis in our set up.[25]

Due to late presentation and poor compliance the most common surgery done is modified radical mastectomy. Patients refuse to seek treatment for down staging and left against medical advice.

Conclusion

1. Despite much research focussed at understanding and monitoring breast cancer, it continues as a major health load.
2. The interpretation of breast cancer incidence and mortality patterns are complex in view of the many interactives known and supposed risk factors, the introduction of screening and the substantial improvements in therapy. It is therefore likely that the descriptive epidemiology of breast cancer will continue to provide insights into the complex causation of this important disease and will suggest the role of primary prevention, early diagnosis and treatment.

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