

Pattern of presentation of breast diseases in a general hospital

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Objective

To determine the frequency of malignant and benign breast diseases and the level of awareness about breast disorders.

Method

This cross sectional prospective descriptive study was conducted at Rawalpindi General Hospital and included 200 female patients. Sampling was done by convenience method. The duration of study was 6 months (from 3rd January 2006 to 3rd July 2006). Patients were interviewed and examined by a female physician of the hospital and later by a senior surgeon. History, physical examination and appropriate investigations like ultrasonography, mammography, FNA and biopsy were carried out. Questions included regarding diagnosis, treatment, and different aspects of breast diseases. Level of awareness was marked as totally ignorant, partly aware or

fully aware.

Results

Out of 200 patients, 82 % had benign and 18 % had malignant disease of the breast. 72% of the malignant disease presented late in Stage III and IV, due to lack of awareness. 63% of the patients were totally ignorant, 25% partially aware and only 12% were fully aware about the disease.

Conclusions

Benign breast disease was more frequent than malignant in our study. The awareness level about breast diseases was very low and it needs to be improved by increasing the breast clinics and mass media education. (Rawal Med J 2009;34: 124-127).

Keywords

Breast diseases, frequency, benign, malignant, level of awareness.

INTRODUCTION

Breast cancer is the commonest cause of death in middle-aged women in western countries,¹ as well as Pakistan.^{2,3} The underlying cause of complaints about the breast proves to be benign in majority of cases.⁴ It is well established that early detection and treatment of breast cancer has better prognosis.⁵ Majority of our patients present with advanced stages of diseases due to different factors one of which is lack of awareness about the disease.^{6,7} A cross sectional descriptive study was carried out in Rawalpindi General Hospital (RGH) to determine frequency of benign and malignant breast diseases and to assess the level of awareness about breast disorders in our women.

SUBJECTS AND METHOD

Two hundred female patients between 13 and 80 years of age were included in the study from January 2006 to July 2006. Psychiatric patients and mentally unstable patients were excluded from the study. All female patients coming with breast complaints were interviewed and examined by a female doctor in the

surgical outpatient department of RGH in separate room and later by a senior surgeon for expert opinion. The staff comprised of consultant surgeon, female doctors and female nurses. The background information included patient's age, level of education, socioeconomic status, age at menarche and age at menopause. Specific information sought included; whether they understood importance of lump, their knowledge about breast cancer and self-examination to find their level of awareness about breast disease.

Young female patients with clinical diagnosis of fibroadenoma were admitted and excision biopsy of the swelling was performed. In case of an indiscrete lump less than 35 years of age, ultrasonography was advised while mammography was recommended for women above 35 years of age. In case of any suspicion in mammography and ultrasonographic findings (e.g., cyst, mass, micro calcification), FNAC was performed. In case of any further doubt, biopsy under local or general anesthesia was performed. The results of relevant tests were recorded on subsequent visits in the same Proforma.

After filling up the Proforma, the patients were educated about breast cancer and printouts were handed over to the literate ones.

Frequency and percentages were used for qualitative data like benign and malignant breast diseases, level of awareness, staging of cancer, level of education, etiology of breast masses, causes of delayed, presentation, causes of breast inflammation. Z-test for proportion was used to check the significance of frequency of benign and malignant breast diseases and level of awareness at 5% level of significance. Data were analyzed by SPSS v 10.

RESULTS

The age of patients ranged from 14 years old student to 71 years (average 33 years). 69% of the patients were married and average age at marriage was 19.5 years. Multiparty and breast feeding was found in 84 % of the patients. Positive family history of breast cancer was present in 15 % of the patients. Average duration of breast feeding was 8 months. Most of the patient did not know their age of menarche, menopausal age and age at the time of first full term pregnancy. Cancer of the breast was common in 40-50 years of age. Fibro adenoma was common in the second decade of life. Fibrocystic disease of the breast presents mostly in the third decade of the life. Out of 200 patients 164 (82 %) had benign disease (Fig 1) and 36 (18 %) had malignant disease (p=0.002).

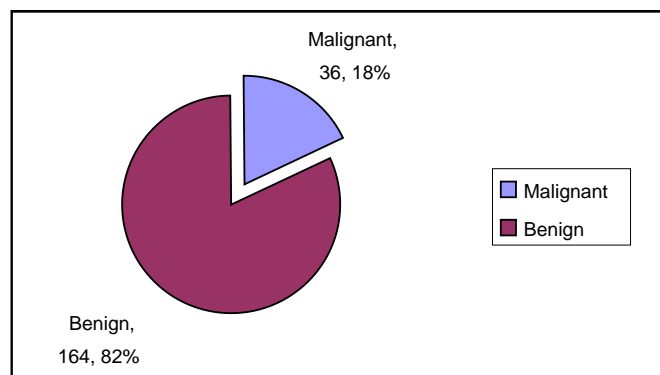
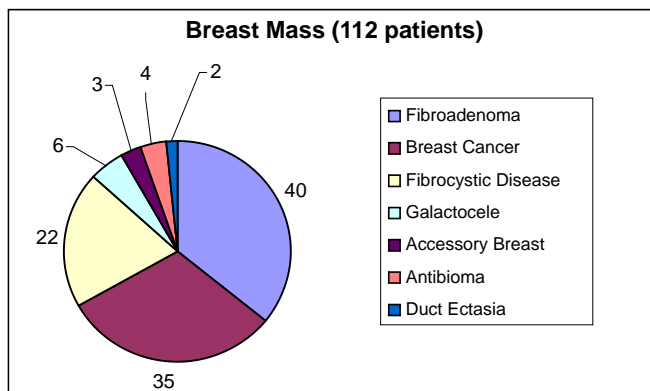


Fig 1. Frequency of Benign and Malignant Breast Diseases.

Breast Mass was presentation in 112 patients (56% of 200 patients). Fibro adenoma of the breast, breast

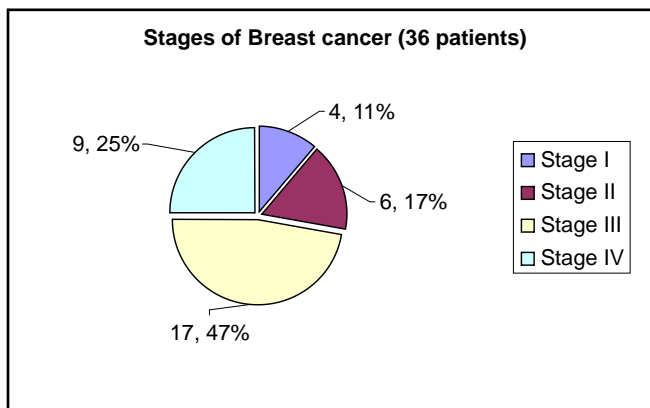
cancer, fibrocystic disease and galactocele were the common conditions which presented with the breast



lump (Fig 2).

Fig 2. Etiology of Breast Mass.

Thirty four patients (17% of 200 patients) presented with mastalgia and out of these, 24 patients (70.5%) had non cyclical mastalgia and remaining 10 patients (29.5%) had cyclical mastalgia. Maximum number of patients with mastalgia presented in third decade of life. Out of 36 patients who presented with breast cancer, 26 patients (72%) were in the Stage III



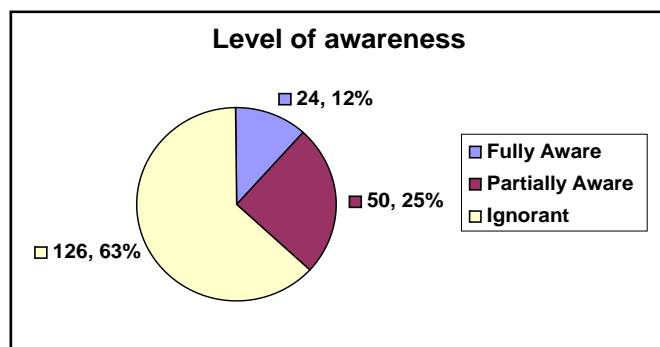
and IV and only 10 (28%) presented in stage I and II (Fig 3).

Fig 3. Stages of Breast Cancer at presentation.

Twenty two percent patients (44 of 200) presented with breast inflammation and the commonest cause among these was breast abscess. Out of these, 30 patients presented with pyogenic breast abscess, 6 with tuberculous abscess, 4 with pubertal mastitis and 4 with cellulitis. Among those with breast

abscess, 24 were lactating mothers, 6 had history of trauma and rest of the patients had tuberculosis and nonspecific inflammation. Ten (5%) patients had nipple discharge and out of these, one patient had breast cancer without any lump or symptoms. Rest of the patients had infection and galactorrhea.

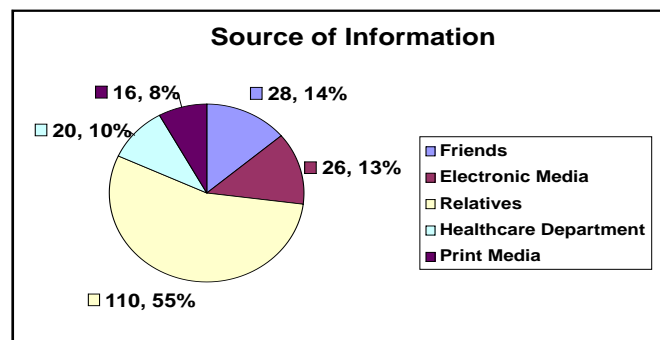
The level of awareness was very poor about the breast disease. Sixty three percent of the patients



(P=0.001) were totally ignorant. Most of the patients who came from rural areas had no idea about the breast diseases (Fig 4).

Fig 4. Level of awareness about Breast Diseases.

Most of the patients (34%) who presented did not have primary level of education and were illiterate. 23% of the patients had primary education and the number of patients with education level above that



was very low. Majority (184 patients, 92%) had no idea of importance of breast self examination and it also included educated females and patients from higher socioeconomic class.

Fig 5. Source of information.

Primary source of information about breast cancer in most cases was through relatives and friends. Only 10 % of the patients had knowledge about it through the health care workers or doctors (Fig 5).

DISCUSSION

Breast cancer is the most common malignancy effecting females all over the world with lowest incidence reported in Asia and Africa.⁸⁻⁹ However, more recently there is an increase in the incidence of breast cancer in developing countries.^{10,11} Different studies conducted at Karachi, Lahore, Rawalpindi and Faisalabad showed that it is the most common malignancy affecting females and its percentage among all tumors was 22.95, 20.8, 26.60 and 23.97% respectively.⁵ This compares with figures of 29.75% from US and 9.48% from Saudi Arabia.^{12,13}

In developing countries, incidence and mortality associated with breast carcinoma is increasing with more young women being affected.^{14,15} The median age of breast cancer in Pakistan is about 40 years which is about 5 years earlier than in the United States.¹⁶ Average duration of breast feeding according to a study conducted in Rawalpindi was 18 months.¹⁷ In our study, most patients were in the age range of 31-40 years and average duration of breast feeding was 8 months. Most of the patients presented with a lump in the breast (56%), while the rest of the patients presented with inflammation (22%), mastalgia (17%) and discharge from the nipple (5%).

Most of the patients had benign breast disease (82%) with fibro adenoma being the commonest. Due to risk of malignancy, many patients require thorough investigation by FNAC, mammography or biopsy.¹⁸ This will confirm and classify fibrocystic disease of the breast as certain histological features like hyperplasia and atypical hyperplasia constitute risk factors for subsequent development of breast cancer.¹⁹ Due to lack of knowledge, education and awareness, women usually ignore a painless lump and report to the doctor or surgeons in advanced stage of the disease. About 72% of our patients presented with advanced stage of breast cancer.

Forty four patients presented with inflammation of the breast and out of these, 36 patients with breast abscess due to unhygienic conditions, tuberculosis and lack of knowledge about breast feeding. Breast abscess was present in 24 lactating women but was rare in non lactating mothers.

In our study, about 92% of the patients were ignorant about the importance of breast self examination. The level of awareness about the breast disease was very poor. 63% patients were totally ignorant about the breast diseases especially patients coming from the rural areas, 25% were partly aware, and only 12% were fully aware. Unfortunately, different studies carried out in Pakistan point to the late presentation due to different factors one of which is lack of unawareness. Average time lapse was 10 months from self discovery of lump and visit to the surgeons, as compared to a time lapse of 18 months according to a study in Rawalpindi,¹⁷ as 21.5% of the patients got treatment from the hakims, homeopaths and self medication. All these problems can be overcome by health education, improvement in the level of awareness and motivation especially with increased contribution of the healthcare workers and mass media.

CONCLUSIONS

Our study revealed that benign disease of the breast is more frequent, present in 82% of the sampled patients and among patients presenting with malignant disease, 72% had advanced breast carcinoma at presentation. This late presentation reflects ignorance, lack of awareness and lack of resources which can be improved by establishing

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breast clinics in every hospital, health education and motivation especially by contribution of health care workers, mass media including television and other electronic media

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