

Original Article

Frequency of Benign and Malignant Diseases of the Breast Lump in Females

1. Abid Hussain 2. Kishwar Naheed 3. Asif Imran

1. Assoc. Prof. of Surgery, MM&DC, Multan 2. Sen. Registrar, Gynae / Obs. MM&DC, Multan
3. Sen. Registrar, Nishtar Hospital, Multan

ABSTRACT

Objective: To determine the relative frequency of Benign and Malignant pathology of breast lump in female patients.

Design of Study: Experimental Study.

Place and Duration of Study: This study was conducted at Margalla Teaching Hospital Rawalpindi and United Medical Center Rawalpindi for the period of 01 year stated from March 2008 to March 2009.

Patients and Method: In this study, 100 Female patients, presented with breast lump. History of the patients, clinical finding of breast lump and Axillary lymph nodes and the results of FNAC or excisional biopsy were recorded in the prepared Performa.

Results: out of 100 female patients, 88 (88%) patients were found with the benign breast disease in 12 patients we found malignancy. In benign breast diseases fibroadenoma was the most common found in 38 patients followed by the fibrocystic disease, found in 26 patients remaining benign breast diseases were breast abscess and duct ectasia. Among the malignancy, Ductal cell carcinoma and lobular carcinoma were found in 8(8%) and 4(4%) patients respectively.

Conclusion: High incidence of carcinoma of breast is noted after 30 years and it is increased subsequently therefore a surgeon managing the breast lump after 30 years should be very careful and suspicious regarding the malignant breast lump. Early diagnosis and management of the carcinoma of the breast has the key role in terms of increased survival rate of the patients.

Key Words: Incidence, FNAC, Excisional Biopsy, Breast Lump

INTRODUCTION

Breast developmentally is a modified sweat gland. Breast goes through physiological changes throughout a woman's life. The main changes occur at puberty during each menstrual cycle, breast feeding and at the menopause. It has paramount importance functionally for the offspring, as benefits of breast feeding are well known. It is considered symbol of womanhood. That is why woman undergoing breast surgery is very conscious. About 20 to 30 % of the women suffer from the breast diseases, requiring the treatment at sometimes in their lives¹. Among the female population breast cancer is the second leading cause of cancer death, especially after the age of 30 years in USA and western world². In all female cancer, breast cancer accounts for about 27% in the western world and one in fourteen female patients can expect to develop breast cancer in their life time³. In Pakistan it accounts for almost 26%⁴ among female cancers.

In addition, higher incidence of breast cancer has been reported in younger age in our population⁵.

There are several factors including social, religious and fear of infertility have hindered the early diagnosis and delay the treatment in our setup⁶. Despite that, 80-90⁷ percent of breast lump are benign in nature. Various

studies show that benign lesions of the breast are more frequent than malignant⁸ tumor. Therefore every breast lump must be thoroughly evaluated by the surgeon to exclude malignancy⁹. It is worth mentioning regarding the breast cancer that early diagnosis is key to increased survival rate of the patient.

PATIENTS AND METHODS

This study included 100 female patients. It was conducted at Margalla teaching hospital and united medical centre Rawalpindi over the period of one year started from March 2008 to March 2009. All the female patients presenting with breast lump at surgical OPD of the Margalla teaching hospital and united medical centre were entertained in our study. It was ethically approved and patients were also informed about the study. These patients were thoroughly examined with special focus on breast lump and axillary lymph nodes. Chest and abdomen were also evaluated to exclude the metastasis in case of known or suspected malignancy. A detailed history of patients including OCP's (Oral contraceptive pills), menarche and menopausal status along with the family history of breast cancer were taken FNAC (fine needle aspiration cytology) of the breast lump was performed. In case of inconclusive FNAC, Excisional biopsy was carried out. Detailed

history, personal bio data, clinical findings of the breast lump, axillary lymph nodes and results of the FNAC or excisional biopsy were registered in the prepared performa.

RESULTS

In our study 24 (24%) patients were in the age group of 35 to 65 years and remaining 76 (76%) patients were in the age group of 18-33 years (shown in table 1). 22 (22%) patients were multiparous and 78(78%) were nuliparous (shown in table 2). In our study results, we found benign breast diseases in 88(88%) patients while in 12(12%) patients we noticed the malignancy (as shown table 3). Among the benign breast diseases fibroadenoma was the most common found in 38(38%) patients. Fibrocystic disease was the next common and it was found in 26(26%) patients while remaining benign breast diseases were breast abscess, cyst and duct ectasia were found 10(10%),8(8%) and 6(6%) patients respectively. In 12 patients of malignant breast lump, ductal cell carcinoma was found in

8(8%) patients followed by the lobular carcinoma in 4(4%) patients.

Table-I: Distribution of Patients According to Age

Number of Patients	Percentage %	Age Group in Years
24	24%	35 – 65
76	76%	18 – 33

Table-2: Distribution of Patients According to Parity Status

Number of Patients	Percentage %	Parity Status
22	22%	Multiparous
78	78%	Nuliparous

Table-3: Outcome of Our Study (N = 100)

Frequency of Benign Breast Diseases			Frequency of Malignant Breast Diseases		
Benign Diseases	Number of Patients	Percentage	Malignant diseases	Number of Patients	Percentage
Fibroaenoma	38	38%	Ductal Carcinoma	8	8%
Fibrocystic	26	26%	Labullar Carcinoma	4	4%
Breast Abcess	10	10%			
Cyst	8	8%			
Duct Ectasia	6	6%			
Total	88	88%	Total	12	12%

DISCUSSION

Female patient with the breast diseases attend the surgical clinic with the various symptoms but breast lump is the most common symptom. Other symptoms include breast pain, nodularity, skin ulcerations and nipple discharge. Our study showed incidence of malignancy 12% which was lower in comparisons to the other studies 26%¹⁰ reported by usmani and 24.8% by choudhary¹¹ in Pakistan. Even the incidence of the breast cancer found higher in western countries i.e. 19.6% reported at Australia by Fleming¹² et al.

Incidence of malignancy in UK as observed by Donegan¹³ WL and Bennett¹⁴ IC 21% and 15% respectively. The study result of Bennett closely

matched to our study result which was 12%.

Our study results revealed 88% of benign breast diseases which are consistent with the study of out AA¹⁵. Another study conducted by Ihekwa at western Africa showed 80.5% of benign diseases in females which almost resemble to our study results. Fibroadenoma(38%) was the most common in our study. The same observation was noted in two local study where they found fibroadenoma, common benign breast diseases with the incidence of 42% and 45% by Rasheed¹⁶ etal and Ali¹⁷ K etal. Murillo¹⁸ etal reported 38% of fibroadenoma in his study which is exactly same to our study results. Fibrocystic disease was the next common disease found in 26%patients in our study. Rasheed etal and Ali K etal noted the same

observation while stern¹⁹ et al reported the fibrocystic disease as most common in the females of middle age group.

Breast abscess was found in 26(26%) patients. Barton²⁰ et al found acute bacterial mastitis common at any age but most frequently effected are patients with lactating breast. The other benign breast diseases were cyst and duct ectasia which were 8% and 6% respectively.

Women reaction to any actual or suspected disease of the breast is disfigurement and loss sexual attractiveness. A significant number in our community are illiterate or poorly educated because of the Islamic belief and modesty. Female patients with the breast lump do not expose their self and avoid to attend the surgical clinic. As a result they present to surgeon when the disease is advance which carries the poor progresses. There is dire need to create the awareness among the female patients regarding breast cancer and they must be encouraged to attend the surgical clinic as early as possible whenever they notice their breast lump, discharge, skin ulceration, nipple retraction or any other abnormality. In this way we can expect to reduce the burden of disease in female population.

REFERENCES

1. Siddiqi K, Imtiaz RM. Pattern of breast diseases: preliminary report of breast clinic. *J Coll Physician Surg Pak* 2001; 11: 497- 500.
2. Berg JW, Hutter RV. Breast cancer. *Cancer* 1995; 75:257-69.
3. Saunders CM, Baum M. The breast. In: Russell RCG, Williams NS, Bulstrode CJK editors. *Bailey and Love's short practice of surgery*. 23rd ed. London: Arnold, 2000: 749-72.
4. Malik IA, Khan WA, Khan ZK. Pattern of malignant tumors observed in a University Hospital; a retrospective analysis. *J Pak Med Assoc* 1998; 48: 120-2.
5. Mehdi I. Breast carcinoma: treat or over treat. (editorial). *J Pak Med Assoc* 1996; 46:142-3.
6. Yusuf A, Khan JS, Bhopal FG, Iqbal M, Minhas S, Mahmood N, et al. Level of awareness about breast cancer among female presenting to a general hospital in Pakistan. *J Coll Physician Surg Pak*. 2001;11:131-5.
7. Murillo Ortiz B, Botello Hernandez D, Ramirez Mateos C, Reynaga Garcia FJ. Benign breast diseases: clinical, radiological and pathological correlation. *Ginecol Obstet Mex* 2002;70:613-8.
8. Caleffi M, Filho DD, Borghetti K, Graudenz M, Littrup PJ, Freeman-Gibb LA et al. Cryoablation of benign breast tumours: evolution of technique and technology. *Breast* 2004;13:397-407.
9. Dunn JM, Lucarotti ME, Wood SJ, Mumford A, Webb AJ. Exfoliative cytology in the diagnosis of breast disease. *Br J Surg*. 1995; 82: 789-91.
10. Usmani K, Khanum A, Afzal H, Ahmed N. Breast carcinoma in Pakistani women. *J Environ Pathol Toxicol Oncol* 1996; 15: 251-3.
11. Chaudhuri M, Sen S, Sengupta J. Breast lumps a study of 10 years. *J Indian Med Assoc* 1995; 93: 455-7.
12. Fleming NT, Armstrong BK, Shiner HJ. The comparative epidemiology of benign breast lumps and breast cancer in Western Australia. *Int J Cancer* 1982 ;30:147-52.
13. Donegan WL. Introduction to the history of breast cancer. In: Donegan WL, Spratt JS, editors. *Cancer of the breast*. 4th edn. Philadelphia: W B Saunders, 1995:1-15.
14. Bennett IC, Freitas R Jr, Fentiman IS. Diagnosis of breast cancer in young women. *Aust N Z J Surg* 1991; 61: 284-9.
15. Out AA. Benign breast tumours in an African Population. *J R Coll Surg Edinb* 1990;35:373-5
16. Rashid R, Haq SM, Khan K, Jamal S, Khaliq T, Shah A. Benign breast disorders, a clinicopathological Study. *Ann Pak Inst Med Sci* 2005;1:187-90.
17. Ali K, Abbas MH, Aslam S, Aslam M, Abid KJ, Khan AZ. Frequency of benign breast diseases in female patients with breast lumps- a study at Sir Ganga Ram Hospital, Lahore. *Ann King Edward Med Coll* 2005;11:526-8.
18. Murillo Ortiz B, Botello Hernandez D, Ramirez Mateos C, Reynaga Garcia FJ. Benign breast diseases: clinical, radiological and pathological correlation. *Ginecol Obstet Mex* 2002;70:613-8.
19. Santen RJ, Mansel R. Benign breast disorders. *N Engl J Med* 2005;353:275-85.
20. Barton AS. The Breast. In: Pathology. Rubin E Farbar JL. 2nd Edn. Philadelphia: JB Lippincott Co 1994;978.

Address for Corresponding Author:

Dr. Abid Hussain,

Associate Professor of Surgery,
Multan Medical & Dental College,
Multan.