A Study of Surgical Breast Disease at Chandka Medical College Teaching Hospital Larkana

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ABSTRACT

Objectives: To find out the number of the breast diseases, its frequency distribution in different age group among the patients attending surgical OPD for surgical consultation.

Material and Method: This is a prospective study conducted at CMC Teaching Hospital Larkana. Patients attending surgical OPD for one or another breast problem were included. They were assessed clinically and their diagnosis was confirmed by cytological (FNAC) or histopathological (biopsy) examination. Then they were subjected to appropriate treatment. It must be mentioned at the outset that no clinical mammography could be done in the case of this study as these facilities are not available at CMC Teaching Hospital Larkana.

Results: 264 cases of breast disease were diagnosed. This includes 232 female and 32 male patients. The ratio between benign and malignant lesions was 13.6:1. The benign breast diseases were the commonest lesions of the breast found in this study (93.2%) whereas malignant lesion was infrequent (6.8%). Among benign breast diseases, the commonest lesion was fibroadenoma (32.57%) followed by breast abscess (24.19%), Aberration of Normal Development and Involution (ANDI) which was 16.63% and gynecomastia (11.34%). 18 cases (6.80%) were of malignant lesion. This includes 16 female and 2 male cases. The common ages for benign breast diseases were, 20-40 years for fibroadenoma, 15-40 years for breast abscess, 18- 40 years for ANDI and 10-19, 50- 59 for gynecomastia respectively, whereas carcinoma breast was common in the age group of forties and fifties.

Conclusion: We conclude from this study that benign breast diseases were the most frequent breast lesion. Among the benign breast diseases fibroadenoma was the commonest lesion. Breast carcinoma cases were less frequent and reached to the hospital in very late stage of the disease.

Key word: Fibro adenoma, Breast Abscess, Breast Cancer

INTRODUCTION

Breast is an organ of female beauty and pride. From poverty to death, the breast is subjected to constant physical and physiological alterations that are related to menses, pregnancy and menopause. The clinical presentation of breast disease depends upon socio-economic conditions, the level of health awareness and knowledge about breast diseases in general population[1]. The impact of breast disease in the western society assumes even greater importance as the incidence of breast cancer continues to increase steadily[2]. One out of every nine American women will develop some variant of the breast carcinoma during their lifetime1. It is a worldwide problem and no race and country is free from this disease. The breast problem could be as simple as breast abscess to as ominous as cancer. Both benign and malignant diseases occur in men and women of all ages but benign lesion tend to occur more commonly at younger age than cancer. Benign breast diseases

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benign breast diseases are common with estimate of over half of the female population at some times in life seeking medical advice for breast problem[3]. Fibrocystic disease is the most common cause of mass seen in Middle Ages. Incidence of breast cancer varies from country to country, being highest in North America and Western Europe, while its incidence is lowest in Africa and Asia[4]. The patients with breast cancer in developing countries including Pakistan present in advanced stage which leads to high incidence of mortality.

The incidence of carcinoma of breast in Pakistan is 24.4% thus making it the commonest malignancy among Pakistani females[5]. Mortality is high in western industrialized countries and relatively low in developing countries in Asia and other parts of the world[2, 6]. Predisposing factors for benign breast diseases are age, sex, racial, inverted nipple, retracted nipple, cracked nipple, improper feeding due to lack of knowledge about breast-feeding and endogenous hormonal factors including menstrual cycle. Similarly there are so many predisposing factors for breast cancer like genetic, racial,

environmental, age and a number of endogenous hormonal factors including age of menarche, age of menopause and age at first full term pregnancy[7]. In this study because of lack of awareness of the breast cancer, most of the women do not perform self-examination of breast and lack of facility of mammogram; breast cancers are often diagnosed in advanced stages. Several studies on clinical presentation of breast carcinoma from different parts of country showed that the majority of patients present in advanced stage of disease[8, 9]. On top of that, the women with breast lump do not go to the doctor, because breast cancer lump are painless and they are too shy to be examined by male doctor. Early diagnosis and surgery is the only way to cure breast cancer and in stage I and II breast cancer is curable. Cancer of male breast is not very frequent and usually they reach to the hospital in very late stage of the disease. It accounts only 10% of all the breast carcinoma[10].

MATERIAL AND METHOD

Two hundred sixty four cases of breast diseases were diagnosed and managed at CMC Teaching Hospital Larkana, over a period of 2 years (September 2007 – August 2009). All these patients were symptomatic. Male patients were also included in this study. Detailed history about menarche, marital status, parity, age at first pregnancy and age of menopause were noted. Physical examination included examination of lump with special attention to any clinical sign of malignancy. Examination of axilla, abdomen, chest wall and skeletal system was carried out if there was any evidence of metastasis. All the cases of lump were subjected to either FNAC or biopsy. If cytological or histopathological examination revealed malignancy, LFT, ultrasound, and whole body bone scan were also done.

RESULTS

Total number of cases of the breast diseases diagnosed was 264. This includes 232 female and 32 male cases. Benign breast diseases cases were 246 whereas malignant cases were 18. The ratio of benign and malignant disease was 13.6:1. Among all the benign breast diseases, fibroadenoma was the commonest, followed by breast abscess, ANDI and gynecomastia in decreasing order of frequency respectively. The common age groups of benign breast diseases were, 20-29 years for breast abscess, 30-39 years for fibroadenoma, 10-19 for gynecomastia and 10-19 years for ANDI whereas common age of cancer breast was 50-59 years. Uncommon lesions of breast were also found in this

study viz. papilloma nipple, galactocoele and accessory breast.

Table 1 illustrates distribution of various diseases of the breast. Benign breast diseases were the commonest (93.20%) whereas the malignant breast disease was less frequent (6.80%). Among the benign breast diseases, fibroadenoma was the commonest (32.57%) followed by breast abscess (24.19%). ANDI and gynecomastia ranked third and fourth respectively. Total number of male cases of breast diseases was 14. Out of 14 cases 12 were of gynecomastia whereas 2 cases were of malignancy.

Table 1. Distribution of breast diseases

Benign lesions	n=	%age
Fibroadenoma	86	32.57
Breast abscess	64	24.19
ANDI		
Cyclic Mastalgia	28	10.58
Noncyclic Mastalgia	16	6.05
Gynecomastia	12	4.54
Phylloides Disease	10	3.77
Tuberculosis Mastitis	6	2.27
Accessory Breast	4	1.51
Galactocele	2	0.75
Inversion of Nipple	6	2.27
Papilloema of Nipple	2	0.75
Discharge of Nipple	6	2.27
Eczema of Nipple	4	1.51
Malignant lesion		
Carcinoma Breast	18	6.80
Total	264	100

Table 2. Fibro-adenoma in different age group

Age	n=	%age
0-9	Nil	Nil
10-19	6	6.96
20-29	28	32.48
30-39	30	34.80
40-49	20	23.20
50-59	Nil	Nil
60-69	2	2.32
Total	86	100

Table 2 shows frequency of breast fibroadenoma in different age group. Fibroadenoma of the breast was most common in thirties (34.80%) followed by in twenties (32.48%). In forties the breast fibroadenoma was diagnosed only in 20 cases (23.20%).

Table3 illustrates distribution of breast abscess in different age groups. Breast abscess was most frequent in twenties (53.12%) followed by in the age group of 10-19 years (31.2%). Only 10 cases (15.6%) were diagnosed in thirties.

Table 3. Breast abscesses in different age

Age	n=	%age
0-9	Nil	Nil
10-19	20	31.20
20-29	34	53.12
30-39	10	15.60
40-49	Nil	Nil
50-59	Nil	Nil
60-69	Nil	Nil
Total	64	100

Table 4. Distribution of ANDI in different age group

Age	n=	%age
0-9	Nil	Nil
10-19	18	42.6
20-29	17	35.5
30-39	9	21.3
40-49	Nil	Nil
50-59	Nil	Nil
60-69	Nil	Nil
Total	44	100

Table 4 illustrates the distribution of ANDI cases in different age groups. It was more frequent in the age group of 10-19 years.

Table 5. Distribution of gynecomastia in different age group

Age	n=	%age
0-9	Nil	Nil
10-19	5	41.67
20-29	Nil	Nil
30-39	4	33.33
40-49	Nil	Nil
50-59	3	25
60-69	Nil	Nil
Total	12	100

Table 5 shows distribution of gynecomastia in different age group. In this study bimodal distribution of the disease was found. It is more common in the age group of 10-19 years (41.67%) and in thirties (33.3%). Out of 12 cases 2 cases were of bilateral gynecomastia.

Table 6 Distribution of breast carcinoma in different age group

Age	=n	%age
0-9	Nil	Nil
10-19	Nil	Nil
20-29	Nil	Nil
30-39	2	11.2
40-49	6	33.3
50-59	10	55.5
60-69	Nil	Nil
Total	18	100

Table 6: describes the distribution of breast carcinoma in different age group. Breast carcinoma was most common in fifties (55.5%) followed by forties (33.3%). Two cases were diagnosed in the thirties (11.2%).

DISCUSSION

The breast disease is commonest health problem in females through out the world including Pakistan. Benign breast diseases were the commonest types of breast lesions in the present study, which accounts approximately 93.2% of all cases seeking medical advice for breast problem at CMC Teaching Hospital Larkana. This result is in contrast to western countries where benign breast diseases accounts only 79% of the breast lesions[9]. Among benign breast diseases, fibroadenoma was the commonest (32.57%) which is comparable with previous studies[11]. Fibroadenoma usually arises in the fully developed breast during 18- 25 years of age period. Although, it may also occur in much older women[11]. Blacks have a greater propensity than white to develop fibroadenomas and at younger age1. The lesion invariably has a relationship to estrogen sensitivity and it occurs predominantly in second and third decade of life[1]. In the present study also, the common age of fibroadenoma was second and third decade which is comparable to the above report. Adolescent cellular fibroadenoma typically occurs in adolescence and bears some resemblance to benign phylloide tumour (Juvenile Adenofibroma, JAF). 5-10% of JAF occurs around the time of menarche[1]. In the present series 7% of the cases were found below the age of 15 years. They may be included in JAF. Breast abscess are often related to lactation and typically occurs within five weeks of breast-feeding. J. Dod also reported in his study that it might occur in women who do not lactate[9]. In the present study breast abscess was the second most common BBD, which accounts for 24% of the cases. All the breast abscess cases were between the age of 10-39 years and majority of them were lactating mothers. Gynecomastia implies the presence of female type mammary gland in male. Most of gynecomastia should not be considered a disease because enlargement of breast is common. Physiologic gynecomastia occurs during three phases of life, neonatal, adolescence and old age (senescence). Adolescent gynecomastia is because of excessive estradiol relative to testosterone. With ageing the plasma testosterone level falls and senescent gynecomastia is caused by a relative hyperestronism. In the present study the gynecomastia is fourth common benign breast lesion, which account 11.34% of all breast diseases. ANDI may occur because

breast is a dynamic structure, which undergoes changes throughout the women's reproductive life. These patients usually present as lumpiness and / or breast pain (mastalgia). Mastalgia could be cyclical or noncyclical. Cyclical mastalgia is associated with breast disease while as noncyclical mastalgia may be associated with ANDI or referred musculoskeletal disorder. In this study 44 cases of ANDI were diagnosed. 28 cases were of cyclical mastalgia where as 16 cases were of noncyclical mastalgia. These cases account 16.63% of total breast lesions whereas in the western countries it accounts 30%. The incidence and mortality are high in the western world and relatively low in Asian developing countries[12]. There are several clearly defined risk factors for breast cancer. Age at menarche has been inversely associated with risk of breast cancer; menarche at a relatively early age is associated with increased risk[13]. Because there is, prolonged exposure to estrogen in early menarche and at higher levels than for those with later menarche. Similarly, it has also been shown that earlier the age of natural menopause, the lower the risk of breast cancer[14]. However, in this study average age of menarche and menopause were 15 and 50 years respectively, which is similar to normal females (15-50 years). Parity and age at first birth are also associated with risk of breast cancer because women of high parity are more likely to have had their first child at a relatively early age. One of the international case control study pointed out that women who first gave birth after the age of 35 had a risk of breast cancer which was three times that of women who had their first child before the age of 18, while the risk for nulliparous women was approximately the same as that for women who had full term pregnancy between the ages of 30 and 35 years[15]. In the present study all the cases of breast carcinoma were married, multiparous and gave birth of the first child at very early age. All these women also breast-fed their children.

CONCLUSION

The breast disease is most common surgical problem our area and worldwide. Among benign breast diseases, fibroadenoma was the commonest, followed by breast abscess, ANDI and gynecomastia. In this study, breast abscess was second most frequent disease of the breast. Majority of these patients were lactating mothers. This may be because of lack of hygiene or improper breast-feeding. The patient with breast cancer reach to the specialist doctor very late because of lack of awareness and illiteracy. An awareness program should be included in the social and preventive medicine schedule at every level of national health care, so that mortality and morbidity could be reduced.

REFERENCES

1. Siddiqui ms, Kayani N, Sulaiman S, Hussaini AS, Shah Sh, Muzafar S, breast carcinoma in Pakistan females: a morphaological study of 572 breast specimen, JPMA, 2000; 50(6): 174-7.
2. Schwartz SI, Shire GT, Spencer FC et al. Principle of surgery, 7th edition chapter 14, Breast, Published by Mc Graw-hillI999; 1:541-542
3. Bradber Johan and Thompson Keith. Lumps in the breast. Surgical problems in clinical practice by Johan Fry and Hadley Arnold publication Ltd. 1987:56-67
4. Camerone RB, Practical oncology: Malignances in breast. London, prentice 1994; P: 419-454. Rasool MI, Malik MI, Luqman M, Khalilullah the clinical pathological study of carcinoma breast. Pak Med Res 1987; 6: 135-6.
5. Kagawa Finger M; Pourat, N. Asian American and Pacific Islander breast and cervical cancers screening rates and healthy people 2000 objectives. Cancer, 2000; 89: 696-705.
6. Pandey JS, Sayami G, Dali S, et. al. Fine needle aspiration cytology of breast lump in T.U. Teaching Hospital. Nep Med Assoc 2002; 41:388-391
7. Kelsy JL and Gammo MD. Epidemiology of breast cancer. Epidemiol Rev 1990; 12: 228- 240
8. Rana F, Younis Jetal. Breast cancer epidemiology in Pakistani women. J, college Physician Surg Pakistan 1998; 8: 20-3.
9. Elston OW, Eliss IO. Pathological prognosis factors in breast cancer, experience from e large study with long term follow up. Histopathology 1991; 19:402-10.
10. Baily's and Love's Short practice of surgery. Edited by RCG Russell, Norman S Williams, Christopher JK Bull strode 23rd edition. Published by Chapman and HALL medical, Madras, India 10. Yadava SS, Bishwas NC, Kidwai M. pattern of breast diseases in breast lump; JNGMC, Jan. 2003; 3:49- 51
11. Simons PS. Diagnostic consideration in breast disorders of children and adolescent. Obs Gyne Clin. North Am 1992 Mar (19): 91-102.
12. Taminga S and Kuroishi T. Epidemiology of breast cancer in Japan. Cancer Letters 1995; 90:75-79
13. Kampert JV, Whitmore AS and Paffenbbarger RS Jr. Combined effect of child bearing, menstrual events and body size on age -specific breast cancer risk. Am J Epidemiol 1988; 128: 962-972
14. Trichopulos D, Mac Mohan B and Cole P. Menopause and breast cancer risk. J Natl Cancer Inst 1972; 48: 605-613
15. Mac Mohan B and Cole B, Lin T H et al. Age at first birth and breast cancer risk. Bull WHO 1970; 43: 209-221