

YOUNG FEMALE BREAST LUMPS; ARE ALL BENIGN?

ABDUL QAYOOM DAUDPOTA¹, KHUSHI MUHAMMED², ATTA HUSSAIN SOOMRO³, HABIB RAHMAN⁴

ABSTRACT

OBJECTIVES: To find out frequency of various diseases and carcinomas in breast lump, its presentation in young female up to age of 35 years.

STUDY DESIGN: Retrospective, descriptive

PLACE AND DURATION: Department of surgery unit II Ghulam Muhammad Mahar Medical College University Hospital Sukkur (GMMC) and Institute of surgery and Medicine (ISM) Hospital Garden road Karachi from November 2007 to June 2013.

METHODOLOGY: All female patients presenting with breast lump upto age of 35 years at GMMC Hospital and ISM Karachi from Nov: 2007 to June 2013, medical records of these patients retrospectively reviewed, patients above age of 35 years, having acute mastitis without lump, recurrent cases, inflammatory carcinomatosa were excluded from the study.

RESULTS: A total number of 510 females up to age of 35 years were included. Among the benign breast disorders fibroadenoma was 56.86%, breast abscess 7.26% fibrocystic diseases 10.59%, benign phylloides 1.77%, fibrocystic diseases 10.59%, and sebaceous cysts 6.08%. Carcinoma breast found in 11.56% (n=59) in our study, the common histopathology was infiltrating ductal cell carcinoma (59.45%).

CONCLUSION: The analysis of this study shows increases frequency of breast cancer in young and adolescent female. These findings suggest that females at every age group with breast lumps need specialized care for diagnosis and management.

KEY WORDS: Young age upto 35 years, Breast Cancer, Breast clinics

INTRODUCTION

Breast is simply modified sweat gland in female, it develops after puberty which is symbol of feminine gender, functionally designed to feed babies¹. Influence of hormones on the complex structure of breast during menarche, menstruation, lactation and menopause, make many changes across these periods in female. Prevalence of carcinoma of breast in younger age has been increased in most part of the world² but there is still general belief that it is the disease old age women, and it is experienced that in every nine Pakistani women is suffering from carcinoma who have breast disorder³.

Patients present different diseases like palpable lump is the first most common presentation and Pain being the second⁴ symptom, all the lumps are not cancer however possibility of cancer cannot be ruled out because 5-10% of them are ultimately diagnosed as cancer in young adolescent⁵. The invasive ductal cell carcinoma is more common⁶ and outcome of breast conservative surgery is better⁷. Therefore presentations of breast lumps and proper approach to manage these cases

appraise the spectrum of breast disorders. With this background the pattern of presentation and appropriate approach according to pathology of various breast diseases including malignancy are analyzed in this study. Awareness about breast disease in community has increased the presentation of painless breast lumps young age cases at surgical or breast clinics is a changing pattern in last decade. Improvement in the diagnostic facilities like histopathology, receptor status ontogen, also helpful to early approach of breast lump or cancer disease is showing the changing pattern of breast cancer and its management in last few decades

METHODOLOGY

This retrospective analytical study is carried out at Surgical unit II Ghulam Muhammad Medical College (GMMC) Sukkur and Institute of Surgery and medicine (ISM) Hospital Garden road Karachi, from January 2007 to June 2013. The data analyzed from patient files record who were up to age of 35 years female presented with breast lump were included in this study. Patients who presented with ruptured abscess, already known cases of malignancy were excluded. The Proforma were designed and these data collected with flow sheet, history & clinical examination of breasts and axilla the results evaluated. For further assessment ultrasonography was carried out while FNAC done in most of the patients, no efforts were made for radiology investigations except in few cases. Biopsies were done in all cases reports facility was taken from pathology Department and private sector laboratories. The data collected and find out various benign and malignant diseases on percentage basis. All the female patients have recurrent disease, acute mastitis inflammatory carcinoma, and above age of 35 years were excluded from this study.

1. Assistant Professor,
Consultant Breast & General Surgeon
2. Assistant Professor
3. Professor
4. RMO

Department of Surgery,
Ghulam Muhammad Mahar Medical College Sukkur

Correspondence to:

Abdul Qayoom
Consultant Breast & General Surgeon
Institute of Surgery and Medicine (ISM)
Hospital Garden Road Karachi
E-mail: surgeonqayoom@yahoo.com

RESULTS

Five hundred and ten patients who presented with breast lump, all were young female and adolescent upto age of 35 years were included in study for the period of 6 years and five months. The most common presentation was breast lump 94.2% (n=471) in this series of 510 cases, the remaining cases were diagnose on physical examination and investigations, next common presentation was breast pain without lump 6.27% (n=32), while nipple discharge in 1.37% (n=07) cases were experienced, Out of 471 cases who presented with breast lump having painless lump in 74.3% and mild dragging pain in 25.6% cases. Thirty two cases never experienced breast lump but cyclical or vague breast pain they have, and seven patients have nipple discharge without lump, but on clinical examination and after further investigation findings were positive for breast lumps. Out of 510 cases, right side affected in 264, left in 223 both sided in 23 patients and 193 were unmarried. Among 317 married women 52 were nulliparous, all other 255 were child bearing (Table-I) and lactating mothers. All necessary investigations and fitness for anesthesia have been done in all cases before going to surgical procedures. FNAC were done in majority of case while in strongly suspected case of malignancy with palpable axillary lymph nodes, core biopsy done in 07 cases and later on lumpectomy for final diagnosis. Patients undergoing surgery, the histopathology of specimen showed that fibroadenoma was most common (56.88%) carcinoma was 11.56% cases in this series. Breast Abscess (7.26%), Galactocele 3.13% Fibrocystic Disease 10.58% Phylloides benign was in 1.76% case was the histopathological diagnosis in this series the surgical

procedures and histopathology reports are shown in table II. The carcinoma was found in 59 cases, the minimum age was 23 years and maximum was 34 years among them (Table II). The most common histopathology was infiltrating ductal cell carcinoma (59.45%) then lobular carcinoma 16.21% scirrhous carcinoma 10.80% and medullary carcinoma was in 5.40% pagets diseases 2.70%. Nine cases have T3 level with palpable lymph nodes, 43 cases at T2 without palpable lymph nodes, one of them has bilateral malignancy and 7 cases record were inadequate for TNM but malignancy were confirmed on biopsy report. Nine cases underwent modified radical mastectomy (Stage III) and remaining went to other hospital for management. Graph - 1 and table III highlights the malignancies (cancer) in young female and adolescent breast lumps.

TABLE – I: CHARACTERISTICS OF BREAST LUMP CASES

Features	No: of Cases	Percentage
Breast lump	471	92.36%
Vague/ cyclical pain	32	06.27%
Nipple discharge	07	01.37%
Married	317	62.15%
Nulliparous=039		
Multipara =178		
Lactating = ALL		
Unmarried	193	37.85%
Breast lump Rt side	264	51.73%
= Lt side	223	43.76%
= Both side	023	04.51%

TABLE-II: FREQUENCY OF VARIOUS DISEASE IN YOUNG ADOLESCENT FEMALE BREAST LUMPS IN 510 CASES

Procedure	Histopathology Reports								Total
	Fibroade noma	Breast Abscess	Cyclical mastitis	Carcinoma Breast	Fibrocystic Disease	Benign Phylloides	Fibro adenosis	Sab: cysts	
Excisional biopsy	103		31	59	33		9	14	176
Lumpectomy	187				21	9	7		76
Incisional Drainage/Bio		37							54
Total	290 (56.86%)	37 (7.25%)	31 (6.07%)	59 (11.56%)	54 (10.58%)	9 (1.76%)	16 (3.13%)	14 (2.74%)	510

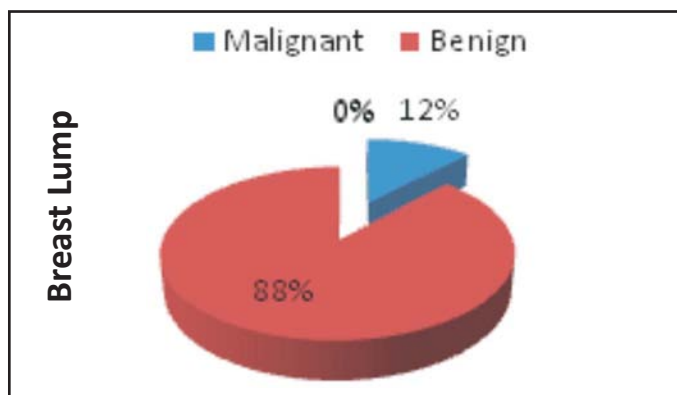


FIGURE I: YOUNG ADOLESCENT BREAST LUMP: ARE ALL BENIGN

DISCUSSION

Breast cancer is challenging disease which is most common in female⁸ usually have onset at the age of 50 to 70 years⁹ but now a day increasing ratio of this disease in younger age group¹⁰ and late onset in males at the age of 60 to 80 year sis the scenario all over the world. Fibroadenoma a solid non inflammatory lump (56.86%) in this series almost matches with published other studies^{11,12}. The breast abscess found in 37 this study (7.26%) cases which is almost near about the studies carried out by MN Taj¹³ quoted 16% and 22% by Nisar Ahmed¹⁴ respectively. Breast cancer was found in 11.56 % cases which is higher than study of 9%¹⁵. The percentage of carcinoma of breast in young

age group is increasing in most part of the world but still generally held belief that it is a disease of old age¹⁶, and more aggressive in younger age¹⁷ in our series 11.56% showing increase frequency in younger age group may be due to awareness and early approach. Modified radical mastectomies were carried out in 9 cases after final diagnosis. Though the immediate breast reconstruction surgery have positive impact on quality of life, and its psychological and spiritual aspects¹⁸ as compare to delayed reconstruction¹⁹ but patient compliance and available facilities are also debatable and have to be considered for malignant cases. Fibrocystic disease were found in 5.1% is lower than the results of Rakhshanda et al (16.8%) and Kamran et al^{20,21}, but few cases were also treated conservatively which may be part of pathology or small lactating abscess resolving (10%) as denoted by Givens MC²². Cyclical mastitis was found in 13.1% which may be higher because they also develop lactational abscess (5.11%) cited by Mass S²³.

Overall it is analyzed that fibroadenoma was the most common cause of breast lump but prevalence carcinoma of breast is also alarming in young females, after amputation of malignant breast, early reconstruction of breast causing more complications²⁴. The rate of surgical infection ranges from 1 to 30%²⁵. It is higher in case of local infiltration of anesthetic agents, previous history of reduction operation²⁶, and prophylaxis antibiotic have also little role in surgical site infection, drain site infection and skin flap necrosis²⁷ are factors which delay the adjuvant chemotherapy / radiotherapy so the delayed reconstruction have positive impacts²⁸ as has been done in few cases this study. Late diagnosis, outcome of radiotherapy on early implant based reconstruction²⁹ or early breast reconstruction by autologous fat, factors are still debatable³⁰ who emphasize us to diagnose breast cancer at early age and early stage in young adolescent women.

CONCLUSION

Conclusion of this study is that breast cancer is increasing in young female and adolescent in Pakistan. It demands early breast disease diagnosis and proper approach, due to increasing incidence of breast malignancy in younger age female of third world countries like us. Special breast clinics were designed for awareness having most modern facilities for early approach, even in low risk cases and not to underestimate during management.

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