

Clinicopathological Outcome in Breast Lesion Biopsies

Asma Umar, Ihsan Ullah Hashmi, Shamia Zeeshan, Mussarat Haider, Rahila Farhat

ABSTRACT

Objective: To determine the clinicopathological outcome in females with breast cancers. **Study Design:** Cross sectional study. **Settings:** Allama Iqbal Medical College Lahore. **Duration:** 01-07-2016 to 01-02-2017. **Methodology:** In this study retrospective data was collected for females of age more than 20 years having breast mass of any size, shape lasting for more than one month in duration were included. The data of their outcome was assessed regarding the various types of malignancies detected. **Results:** In this study there were 175 cases of CA breast assessed. The mean age of the subjects was 48.67 ± 13.47 years and mean duration of symptoms was 2.71 ± 1.02 months. There were 82.85% of the cases from rural population, 54.28% had left sided breast lesions. Out of 175, only 8 (4.57%) were smokers and 24 (13.7%) had family history of malignancy. The most common malignancy seen was invasive ductal CA which was seen in 153 (87.4%) of the cases, followed by invasive lobular carcinoma seen in 7 (4%) of the cases. **Conclusion:** CA breast is not uncommon and the most common sub type seen is invasive ductal carcinoma.

Keywords: CA, Breast, Invasive ductal, lobular

Corresponding Author

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DR. ASMA UMAR, Women Medical Officer, Allama Iqbal Medical College, Lahore
 Contact / Email: +92 335-8061991, asmaumar79@gmail.com

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INTRODUCTION

Breast cancer is the most successive disease in ladies with 1.05 million new cases each year and it represents over 20% of all malignancies among females.¹ Most of the incidence of breast malignant growth happens in the developed world as compared to developing ones; though the data is also lacking. The highest incidence is seen in Europe and North America.²

There is great degree of difference regarding the knowledge, prevalence and data regarding these malignancies across the globe and according to a survey this prevalence is seen in one out of every 9 females³ and among the most common female diseases.⁴ While the epidemiological studies for CA breast carried out at this region have for the most part centered around hazard factors, for example, age at menarche, menopause, religion and regenerative history, very little thought has been given to the role of family ancestry despite the fact that hereditary inclination is in charge of 5–10% of all bosom tumors.⁵⁻⁶ There is a controversy in the literature regarding role of parity and breast feeding on the incidence of breast cancer.⁷ There are different types of malignancies and depend upon the individual histopathology types. A few morphological and clinical parameters, for example, histological kind of tumor, tumor grade, axillary lymph hub inclusion, bilaterality and so forth have been confirmed in breast malignancy patients as the indicators of tumor behavior. These prognostic variables are markers of the inborn forcefulness of the tumor just as of the degree of the sickness and dependent on these elements, treatment choices are being taken up by the clinicians.⁸⁻⁹

OBJECTIVE

To determine the clinicopathological outcome in females with breast cancers.

METHODOLOGY

Study Design: Cross sectional retrospective study

Settings: Allama Iqbal Medical College Lahore-Pakistan.

Duration: 01-07-2016 to 01-02-2017.

Inclusion Criteria: In this study the females of age more than 20 years having breast mass of any size, shape lasting for more than one month in duration were included.

Exclusion Criteria: The lactating mothers, the cases with platelet count less than 30 thousand and those with any bleeding disorder and lesion site infection were excluded from this study.

Methods: The data of their outcome was assessed regarding the various types of malignancies detected.

Statistical Analysis: SPSS version 24.0 was used for data analysis and interpretation. The qualitative data were presented as frequency and percentages, while Quantitative data as mean and standard deviation.

RESULTS

In this study there were 175 cases of CA breast assessed. The mean age of the subjects was 48.67 ± 13.47 years and mean duration of symptoms was 2.71 ± 1.02 months. Table 1

Table 1: Study demographics (n=175)

Study variables	Mean \pm SD	Range
Age	48.67 ± 13.47	22-70
Duration of symptoms (months)	2.71 ± 1.02	1-12

82.85% of the cases from rural population, 54.28% had left sided breast lesions. Out of 175, only 8 (4.57%) were smokers and 24 (13.7%) had family history of malignancy. Table 2

Table 2: Study variables (n=175)

Study variables	Number	Percentage
Rural	145	82.85%
Urban	30	17.15%
Side of breast (left)	95	54.28%
Side of breast (right)	80	45.72%
Smoker	8	4.57%
Family h/o malignancy	24	13.7%

The most common malignancy seen was invasive ductal CA which was seen in 153 (87.4%) of the cases, followed by invasive lobular carcinoma seen in 7 (4%) of the cases. Papillary CA was seen in 3.4% metaplastic in 2.9% and medullary CA in 1.1% of the cases. Table 3

Table 3: Types of malignancies (n=175)

Types	Number	Percentage
Invasive ductal carcinoma	153	87.4%
Invasive lobular carcinoma	7	4%
Papillary carcinoma	6	3.4%
Metaplastic CA	5	2.9%
Medullary CA	2	1.1%
Mucinous CA	1	0.5%
Mixed	1	0.5%

DISCUSSION

CA breast is considered as one of the most common malignancies seen across the world and the 2nd most common in females in the data from United States. There are number of risk factors of this and wide diversity of the clinical subtypes diagnosed on histopathology which has direct impact on the outcome and survival rate.⁹⁻¹⁰

The recent data has shown a rapid incline in the degree of rise in breast malignancies in Asian countries. The data from a Pakistani study has shown it to be the most common malignancy in females.¹⁰ The data from Karachi Institute of Radiotherapy and Nuclear Medicine (KIRAN) and Jinnah emergency clinic Lahore have additionally shown breast malignant growth to be the commonest disease of ladies representing 38% of all.¹¹ In the data from metropolitan countries like United Kingdom, Australia and USA have shown this in 30%, 27% and 26% respectively.¹²

In the present study the most common malignancy seen was invasive ductal CA which was seen in 153 (87.4%) of the cases, followed by invasive lobular carcinoma seen in 7 (4%) of the cases. Papillary CA was seen in 3.4% metaplastic in 2.9% and medullary CA in 1.1% of the cases. The results of the present study were almost similar to the findings of the previous studies. According to a study done by Tariq H et al, on various breast malignancies detected, irrespective of the gender and age, it was observed that the most common type of CA detected was

invasive ductal CA which was seen in 89.2% of the cases. It was followed by invasive lobular carcinoma which was seen in 2.7% of the cases and both of these findings were pretty close to the finding of the present study.¹³

Invasive lobular carcinoma (ILC) is the second major naturally particular intrusive mammary carcinoma other than Infiltrating ductal carcinoma. It comprises 5%–15% of obtrusive breast carcinoma.¹⁴ ILC tumor cells are commonly round, little, generally uniform, and non-cohesive and have trademark development design with single-record penetration of the stroma. Medullary carcinoma is an uncommon, unique subtype of CA breast introduced by a well-characterized tumor mass and anaplastic morphology; regardless, it has good forecast and preferable result over the normal IDC. It influences ladies around 50 years old. It is especially regular in bearers of BRCA1 mutations.¹⁵ It represents under 5% of mammary carcinomas in many arrangement, however recurrence as high as 7%.¹⁴ The net appearance can without much of a stretch be confused with a fibro adenoma. Microscopically, it is a "well-encompassed carcinoma made out of inadequately separated cells with insufficient stroma and noticeable lymphoid penetration".¹⁶ Level of medullary carcinoma was 0.5% in the current study. Invasive papillary carcinoma is an exceptionally uncommon subtype of bosom carcinoma with preferred visualization over exemplary IDC, generally influencing the post-menopausal ladies and is increasingly basic among white ladies. It involves under 1%–2% of intrusive breast cancers.¹⁶ Most papillary carcinomas of the breasts are transcendently intraductal injuries. The intrusive papillary carcinoma ought to have an overwhelmingly papillary morphology not less than 90% in the obtrusive segment.¹⁷⁻¹⁸ In the present analysis 3.4% of the cases were Invasive papillary carcinoma.

CONCLUSION

CA breast is not uncommon and the most common sub type seen is invasive ductal carcinoma.

REFERENCES

1. Parkin DM, Bray F, Ferly J, Pisani P. Estimating the world cancer burden: Globocon 2000. *Int J Cancer*. 2001;94(2):153-6.
2. Parkin DM, Pisani P, Ferlay J. Estimates of worldwide incidence of 25 major cancers in 1990. *Int J Cancer*. 1999;80(6):827-41.
3. Sohail S, Alam SN. Breast cancer in Pakistan: awareness and early detection. *J Coll Phys Surg Pak*. 2007;17:711-2.
4. Menhas R, Umer S. Breast cancer among Pakistani women. *Iran Iran J Public Health*. 2015;44(4):586-7.
5. Badwe RA, Gangawal S, Mitra I, Desai PB. Clinico-pathological features and prognosis of breast cancer in different religious communities in India. *Indian J Cancer*. 1990;27(4):220-8.
6. Anderson DE. Some characteristics of familial breast cancer. *Cancer*. 1971;28(6):1500-4.
7. Irfan S, Lodhi MFB, Pervaiz K, Akram M, Kanwal S, Rehman MA, et al. Relation of Breast Cancer with Parity and Breastfeeding. *APMC* 2014;8(2):180-3.
8. Siegel R, Ward E, Brawley O, Jemal A. Cancer statistics, 2011: The impact of eliminating socioeconomic and racial disparities

on premature cancer deaths. CA Cancer J Clin. 2011;61(4):212-36.

9. National cancer registry programmed: Consolidated report of the population-based cancer registries 1990–1996. Indian Council of Medical Research, New Delhi 2001.

10. Bhurgri Y, Bhurgri A, Nishter S, Ahmed A, Usman A, Pervez S, et al. Pakistan country profile of cancer and cancer control 1995-2004. J Pak Med Assoc. 2006;56:124-30.

11. Hanif M, Zaidi P, Kamal S, Hameed A. Institution based cancer incidence in a local population in Pakistan: Nine-year data analysis. Asian Pac J Cancer Prev. 2009;10:227-30.

12. Jemal A, Siegel R, Ward E, et al. Cancer statistics 2009. CA Cancer J Clin. 2009;59(4):225-49.

13. Tariq H, Zubair M, Hashmi SN, Afzal S, Hamdani SNR, Tariq S, Ranjha W, Shahid A. Clinicopathological spectrum of breast carcinoma study of 1764 cases. Pak J Pathol. 2016;27(3):110-8.

14. Lakhani SR, Ellis IO, Schnitt SJ, Tan PH, Van de Vijver MJ, eds. WHO Classification of tumours of the breast. Fourth ed. IARC, Lyon; 2012. ISBN.13.





15. Farid M. Essentials of diagnostic breast pathology, practical approach. 1st ed. Berlin: Springer; 2007. ISBN 978-3-540-45117-4.

16. Rosai J. Rosai and ackerman's surgical pathology. Tenth ed. Elsevier, Lyon, France; 2011.

17. Fattaneh AT, Peter D. WHO Classification pathology and genetics of tumours of the breast and female genital organs. IARC Press, Lyon, France; 2003.

18. Karakas, C. Paget's disease of the breast. J Carcinog. 2011;(10):31-9.

AUTHORSHIP AND CONTRIBUTION DECLARATION

AUTHORS	Contribution to The Paper	Signatures
Dr. Asma Umar Women Medical Officer Allama Iqbal Medical College, Lahore	Original Idea, Original work, data collection Analysis of paper writing, Discussion writing, analysis of results, results interpretation	
Dr. Ihsan Ullah Hashmi Associate Professor of Pathology Allama Iqbal Medical College, Lahore	Proof Reading	
Dr. Shamia Zeeshan Senior Demonstrator Allama Iqbal Medical College, Lahore	Data Collection	
Dr. Mussarat Haider Senior Registrar, Gynecology Allied Hospital, Faisalabad	Literature Review	
Dr. Rahila Farhat Ch Associate Professor, Gynecology Aziz Fatima Medical College, Faisalabad	References & Final Layout	