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Histopathological Spectrum of Breast Carcinomas: A 5 Year Retrospective Study of 162 Cases in A Teritiary Care Centre

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ABSTRACT:- Invasive breast carcinoma is a group of malignant epithelial tumours characterized by invasion of adjacent tissues and a marked tendency to metastasize to distant sites.The vast majority of these tumours are adenocarcinomas and are believed to be derived from the mammary parenchymal epithelium, particularly cells of the terminal duct lobular unit(TDLU).A 5 retrospective study was done to know the variants of breast carcinomas .A 5 retrospective study was done to know the variants of breast carcinomas and their prognosis

KEYWORDS: breastcarcinoma, variants

I. INTRODUCTION

According to Globocan 2012,India is facing challenging situation due to 11.54% increase in incidence and 13.82% increase in mortality due to breast cancer during 2008–2012.

Breast cancer projection for India during time periods 2020 suggests the number to go as high as 17,97,900.Invasive breast carcinoma is a group of malignant epithelial tumours characterized by invasion of adjacent tissues and a marked tendency to metastasize to distant sites.The vast majority of these tumours are adenocarcinomas and are believed to be derived from the mammary parenchymal epithelium, particularly cells of the terminal duct lobular unit(TDLU).A 5 retrospective study was done to know the variants of breast carcinomas.Classification into many histological subtypes according to a wide range of criteria:

i) Including cell type (as in Apocrine carcinoma),
ii) Amount, type and location of secretion (as in Mucinous carcinoma),
iii) Architectural features (as in Papillary, Tubular, and Micropapillary carcinoma),
iv) Immunohistochemical profile (as in Neuroendocrine carcinoma).
V) Receptor status ER +ve (Mucinous carcinoma) HER2 + (Apocrine carcinoma) ER and HER2 –ve (Triple negative) (Medullary Carcinoma, ACC)

AIMS and OBJECTIVES

1. To analyze the different Variants of Breast carcinoma
2. To know the incidence of breast carcinomas according to age.
3. To know about the prognosis of Breast carcinomas based on histopathological variants.

II. MATERIALS & METHODS:

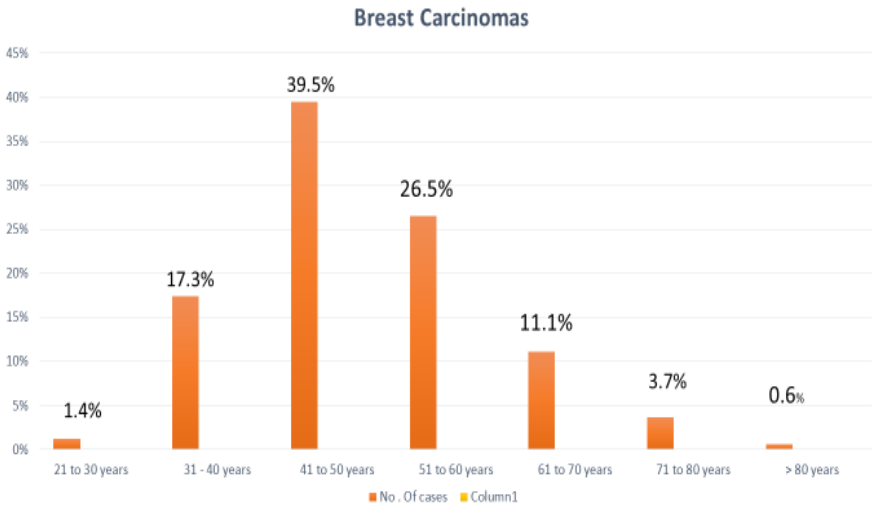
A 5yr Retrospective study was conducted on 162 Breast carcinoma specimens (MRM, simple mastectomy , lumpectomy, biopsies) and processed, in Department of Pathology from July 2013 to June 2018.Breast specimens are processed , sections of 3-5 µ thickness were cut and stained with routine haematoxylin and eosin stain.

III. OBSERVATIONS

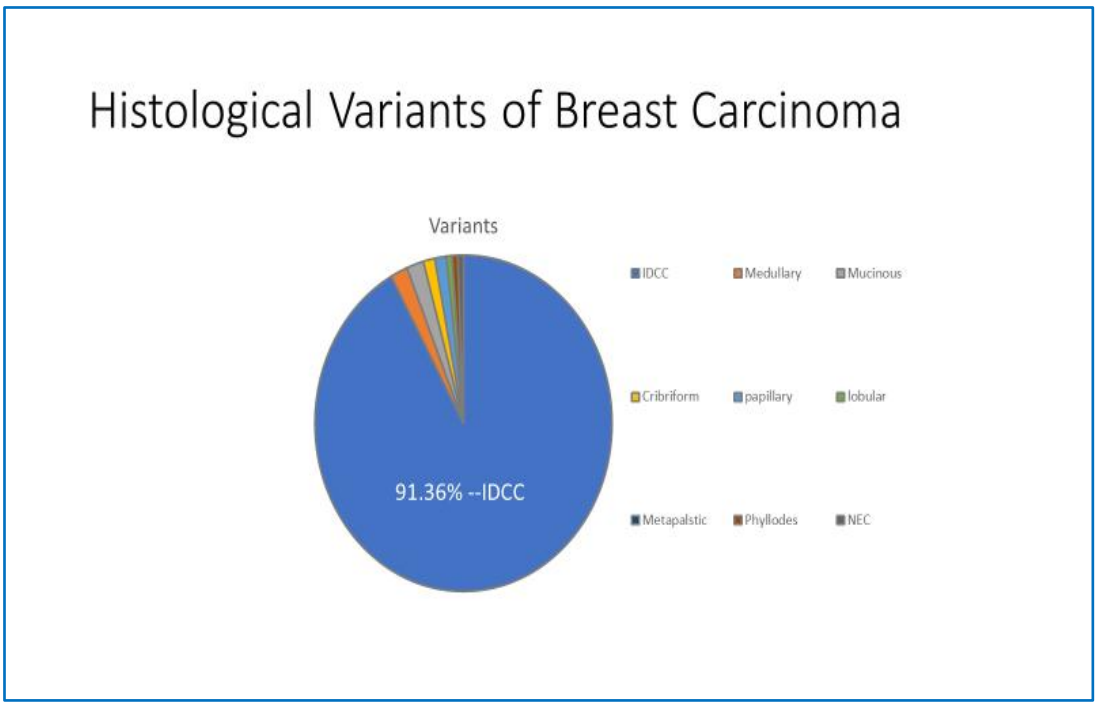
Age incidence

Age in Years	Number of Patients	Percentage
21 – 30	2	1.4 %
31 – 40	28	17.3 %
41 – 50	64	39.5 %
51 – 60	43	26.5 %
61 – 70	18	11.1 %
71 – 80	6	3.7 %
> 80	1	0. 6 %
Total	**162 cases**	**100%**

Age wise distribution

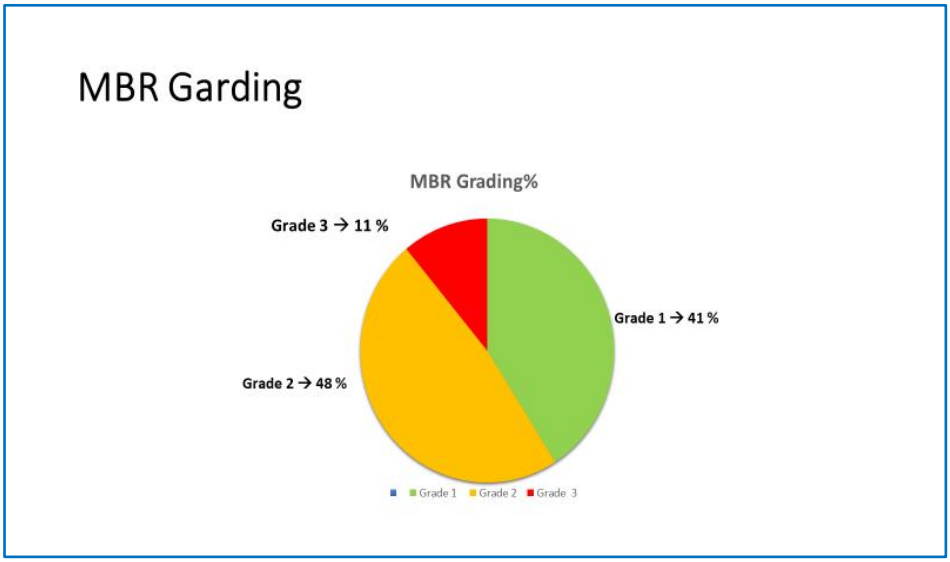


Breast Carcinomas variants	NO.OF CASES	PERCENTAGE
1. Invasive Duct cell carcinoma NST	148	91.36%
2 . Medullary Carcinoma	3	1.85 %
3 . Mucinous Carcinomas	3	1.85%
4 . Invasive cribriform Carcinoma	2	1.25 %
5. Invasive papillary carcinoma	2	1.25%
6. Invasive Lobular Carcinoma	1	0.61%
7.Metaplastic carcinoma	1	0.61%
8. Malignant phyllodes	1	0.61%
9. .Neuroendocrine Carcinoma	1	0.61%
TOTAL	162	100



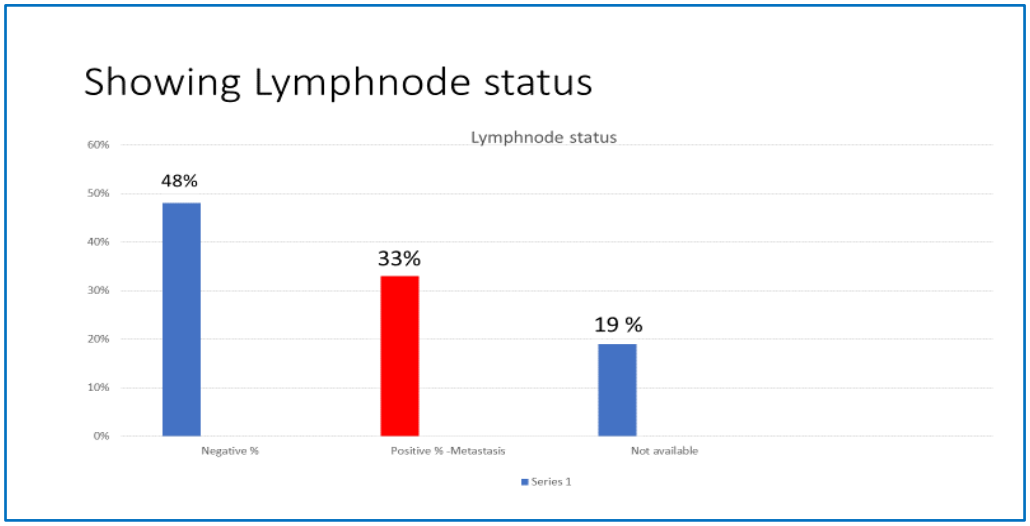
Modified Bloom Richardson's Grading System

Histological Grade	Number of patients	Percentage
Grade I	66	41 %
Grade II	78	48 %
Grade III	18	11 %
Total	162	100 %



Lymphnode involvement

Lymph node status	Number of cases	Percentage
Negative	78	48%
Positive	53	33%
Not available	19	19%
Total	162	100%



IV. DISCUSSION

Out of 162 Mastectomy and lumpectomy cases:

Most common cases are Invasive Duct cell Carcinomas No special type (91.36%), mostly showing MBR Grade 2 (48%) and 33% cases show lymphnode metastasis .Indian women having breast cancer are found a decade younger in comparison to western women suggesting that breast cancer occurs at an younger premenopausal age in India.

Prognosis Based on Histological type

Breast Cracinoma Histological variants	Prognosis
Cribriform carcinoma	Excellent prognosis
Pure mucinous	Good Prognosis
Medullary carcinoma With lymphoplasmocytic infiltrates	Good Prognosis
Tubular , lobular carcinoma	Good prognosis
Papillary , Adenoid cystic carcinoma	Good prognosis

Carcinomas	Prognosis
Mixed Mucinous	Poor prognosis
Metaplastic carcinomas	Poor prognosis
Micropapillary carcinoma	Poor prognosis
Inflammatory carcinoma	Very Poor prognosis

V. CONCLUSION

The incidence of breast carcinomas is increased.
Most carcinomas are Invasive breast Carcinomas of No special type mostly presented with MBR Grade 2,
33% cases shows lymphnode metastasis. Based on Histopathological features we can asses the prognosis of the patient.
Excellent prognosis is seen in, Cribriform carcinoma etc.
Poor prognosis Is seen in Met plastic and Micropapillary carcinomas,
Worst prognosis is seen in inflammatory carcinoma.
As Breast cancer is increasing in younger age groups in India when compared with westerncountries, this stresses the need for change in modalities of early cancer detection, modifying, and adjusting control efforts and multidisciplinary therapeutic efforts

REFERENCES

[1]. Epidemiology of breast cancer in Indian women Shreshtha MALVIA,1 SarangadharaAppalaraju BAGADI,1 Uma S. DUBEY2 and Sunita SAXENA1 *1National Institute of Pathology (ICMR), Safdarjung Hospital Campus, New Delhi 2Birla institute of Technology, Pilani, Rajasthan,India*

[2]. Age shift: Breast cancer is occurring in younger age groups - Is it true? Brinder Chopra, Vaneet Kaur, Kamaljit Singh, Minni Verma, Sukhpreet Singh, Ajmer Singh [1] Department of Biochemistry, Gian Sagar Medical College and Hospital, Banur, India Department of Surgery, Patiala Surgical Centre, Patiala, Punjab, India

[3]. Lakhani SR, Ellis IO, Schnitt SJ, Tan PH, Van de Vijver MJ, editors. WHO Classification of Tumours of the Breast. Fourth ed. IARC; Lyon: 2012. ISBN.13.

[4]. **9.4.**Peter B, Bernard L. World Cancer Report. International Agency for Research on Cancer; WHO Press; Lyon, France: 2008.

[5]. Fattaneh AT, Peter D. WHO Classification Pathology and Genetics of Tumours of the Breast and Female Genital Organs. IARC Press; Lyon, France: 2003..

[6]. Vinay K, Abul KA, Jon CA, Nelson F. Robbins and Cotran Pathologic Basis of Disease.Ninth ed. Elsevier; Lyon, France: 2010

[7]. Eheman CR, Shaw KM, Ryerson AB, Miller JW, Ajani UA, White MC. The changing incidence of in situ and invasive ductal and lobular breast carcinomas. Cancer Epidemiol Biomarkers Prev. 2009;18(6):1763–9. [PubMed]

[8]. Rosai J. Rosai and Ackerman's Surgical Pathology. Tenth ed. Elsevier; Lyon, France: 2011. Peter B, Bernard L. World Cancer Report. International Agency for Research on Cancer; WHO Press; Lyon, France: 2008.

[9]. Diversity of Breast Carcinoma: Histological Subtypes and Clinical Relevance. *Clinical Medicine Insights: Pathology* 2015:8 23–31 doi: 10.4137/CPath.S31563

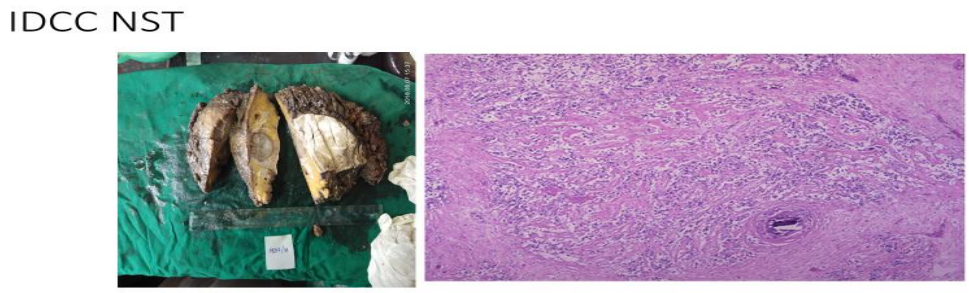
[10]. Hanby AM, Hughes TA. In situ and invasive lobular neoplasia of the breast. *Histopathology*. 2008;52:58–66

[11]. Yu JI, Choi DH, Park W *et al.* Differences in prognostic factors and patterns of failure between invasive micropapillary carcinoma and invasive ductal carcinoma of the breast: matched case-control study. *Breast* 19, 231–237 (2010).

[12]. Vo T, XingY Meric-BernstamF, et al. Long-term outcomes in patients with mucinous, medullary, tubular, and invasive ductal carcinomas after lumpectomy Am J Surg 2007 vol. 1944 (pg. 527-531).

Images…

Images 1.



Images 2.

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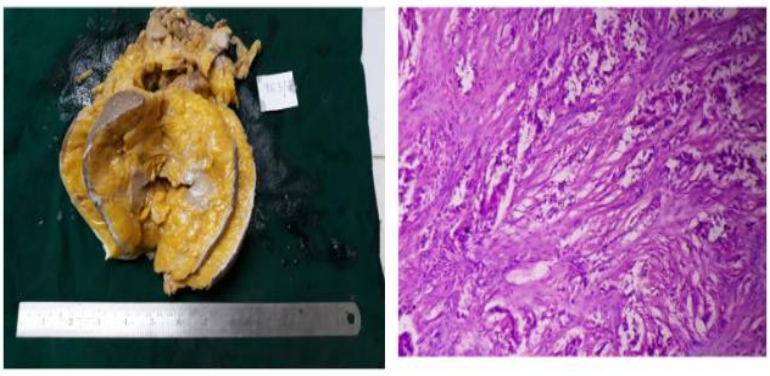
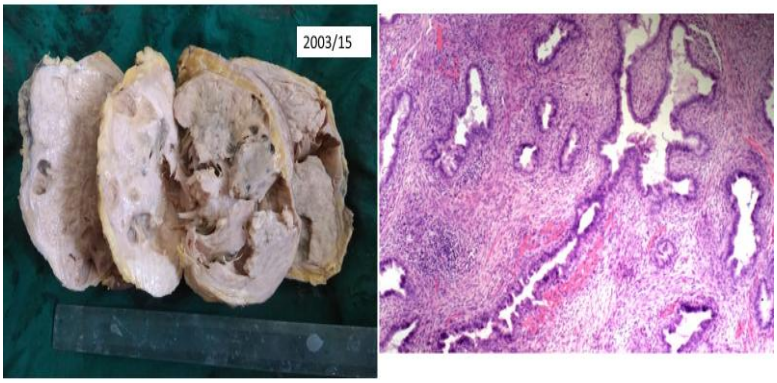


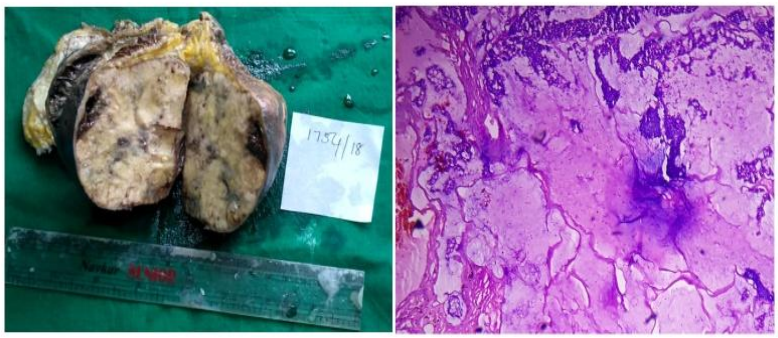
Images 4.

Malignant phylloides



Images 5.

Mucinous Carcinoma of Breast



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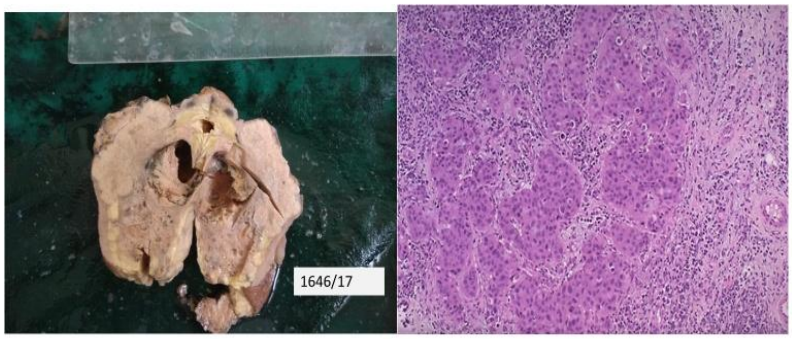
Medullary Carcinoma



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