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**Original Research Paper** 

Pathology

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# CLINICAL PROFILE OF BREAST CARCINOMA: A PROSPECTIVE ANALYSIS AT A TERTIARY CARE CENTRE

Ishant Sharma	Medical Officer, Pathology, Civil Hospital, Palampur, Kangra, Himachal Pradesh, India.
Abhilash Singh*	Department of Pathology, Dr Rajendra Prasad Govt. Medical College, Kangra, Himachal Pradesh, India. *Corresponding Author

**ABSTRACT** Introduction: Breast cancer is the second most common cancer in women in India. Even though the evaluation and treatment of patients is done as per western guidelines, there are considerable variations in risk factors, presenting stage and prognostic factors such as receptor status.

Material and Methods: This was a hospital based cross-sectional observational study conducted for two years in the Department of Pathology, Indira Gandhi Medical College, Shimla.

**Results:** Most of the patients (33.3%) were in the 41-50 years age group followed by 25.5% in 61-70 years and 23.5% in 51-60 years age group. Most of the patients were in grade II. Nearly half of the patients had metastasis in lymph nodes. **Conclusion:** Our findings contribute relevant information about breast cancer in this region.

# **KEYWORDS** : Breast cancer, metasis, clinical profile

# INTRODUCTION

Breast carcinoma is a major health problem worldwide as well as in India. It is the most common cancer among women accounting for 18% of malignancies in females.<sup>1</sup> Jana SH et al in a study has reported breast ca to be a leading cause of morbidity and morbidity in India.<sup>2</sup> Diagnosis of breast cancer at an early stage is important for the management and good prognostic outcome. Many variables have been shown to correlate with prognosis of patients. Most useful prognostic parameters are tumor size and histological grade, presence/absence of axillary lymph node metastasis.<sup>3</sup>

At present NBRG is the most used grading system throughout the world for the histopathological grading of IDC. It evaluates three features: tubule/gland formation, nuclear pleomo rphism and mitotic count.<sup>4</sup> A uniform grading system brings objectivity to the diagnosis and clinicians use this information to choose the treatment modality for the patients. Invasive breast carcinoma 'NOS' is the most frequent histological type of breast carcinoma.

## METHODS

This was a hospital based observational study conducted for two years from 1<sup>#</sup> May 2018 to 30<sup>th</sup> April 2020 in the Department of Pathology, Indira Gandhi Medical College, Shimla. All the proven cases of Infiltrating ductal carcinoma of breast (Modified Radical Mastectomy) were considered for study. Patients were excluded with benign lesions of breast, breast malignancy other than infiltrating duct carcinoma, core needle biopsies/small biopsies, post neo-adjuvant chemotherapy mastectomy specimens, and/or refusal to participate.

Data were presented as frequency and percentages.

## RESULTS

#### Age

Most of the patients (33.3%) were in the 41-50 years age group followed by 25.5% in 61-70 years and 23.5% in 51-60 years age group. Three patients aged above 70 years while six patients aged between 30-40 years (Table 1).

## Table 1: Age distribution

Age group (Years)	Number	Percentage
30-40	6	11.7%
41-50	17	33.3%
51-60	12	23.5%
61-70	13	25.5%

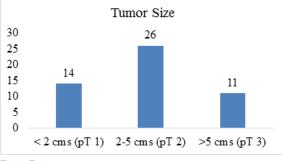
71-80	3	6%	
Total	51	100%	

#### Side of breast involved

The left breast was slightly more commonly involved as compared to the right breast. No bilateral breast tumor was found.

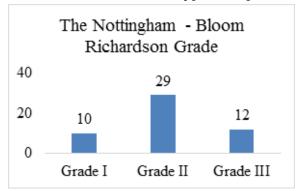
## Tumor size

26 (51%) cases of IDC in our study fall in the stage pT2 with tumor size of 2-5 cm. (Figure 1).



#### Fig 1: Tumor size Histological grade

Grade II was most common followed by grade III (Figure 2).



## Fig 2: Histological grade

## DISCUSSION

The incidence of breast cancer in India is rising and it is the most common cancer among women in urban population. The prognosis and outcome of diseases depends on the timely diagnosis and management. So histopathological examination followed by immunohistochemistry evaluation has become a routine investigation to plan the treatment, predict the response to therapy and thus, to determine the prognosis.

In various studies there has been wide age range of IDC. The mean age in the literature has been found to vary from 48 years to 53 years.<sup>5</sup> So, it is a malignancy commonly occurring in the 5th and 6th decade.

The most frequently observed histological grade was grade II of IDC. Greengough classified breast carcinoma in 1925 into 3 grades of malignancy.<sup>6</sup> Subsequently Patey and Scarff in 1928 also proposed the grading system with little changes in previous grading system.<sup>7</sup> In 1933 Haagensen evaluated 15 histological features which mainly include growth pattern, cell morphology and the stromal reaction.<sup>8</sup>

In 1957 this classification was upgraded by modifications of Bloom and Richardson which used the same grades as classified by Greengough (1925), Patey and Scarff (1928) and Haagensen (1933). Furthermore in 1991, Elston modified this classification known as the Elston and Ellis modified Bloom and Richardson grading.<sup>9</sup> This is also referred to as the Nottingham modification of Bloom and Richardson system.

#### CONCLUSION

Implementation of the simple and effective screening programs for early detection is urgent need in our population.

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