

**A RETROSPECTIVE STUDY OF CLINICOPATHOLOGICAL SPECTRUM OF  
CARCINOMA BREAST IN HAMIDIA HOSPITAL BHOPAL, MADHYA PRADESH, INDIA**

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**ABSTRACT**

**BACKGROUND:**

Data on the demographic profile of breast cancer patients from Hamidia hospital Bhopal higher referral center. Our hospital caters to patients from an urban population of the lower socioeconomic status and is a representation of cases at a tertiary care hospital in Bhopal. In Bhopal, breast cancer is 2<sup>nd</sup> most common cancer (22.2%) among the female followed by cervical cancer (24.9%), ovary (6.1%), mouth and esophagus (5.8%).

**METHODS:**

A demographic data, treatment profile and Histopathological profile of total 338 cases studied who came to Hamidia hospital Bhopal from April 2014 to March 2015.

## RESULTS:

Among these 18.6% were diagnosed as carcinoma breast on Histopathological basis and 81.3% diagnosed as benign breast disorders like fibroadenosis, fibroadenoma, duct ectasia etc. Breast cancer incidence peaks in the age group 41 to 50yrs in Bhopal 82% presents at later stages of breast cancer i.e. stage III and IV. Histopathology showed that infiltrating ductal carcinoma was the commonest variant comprising of 90.5% of cases followed by medullary carcinoma (3.17%) of the large population.

## CONCLUSION:

In India breast cancer incidence is increasing and in Bhopal the most common age group affected is 40-50yrs and most patients presenting in stage III and IV.

**KEYWORDS:** Breast cancer, India, lump, Bhopal, Histopathological

## INTRODUCTION:

Global breast cancer burden is increasing now a day. In various studies it has been shown that the incidence of breast cancer is increasing in india<sup>1,2,3</sup>. Due to lack of awareness on early detection and barriers to health services, most women with breast cancer are diagnosed in late stages in developing countries<sup>4</sup>. Breast cancer is the most common diagnosed malignancy in women worldwide (22%) and in India (18.5%) it ranks second to cervical cancer<sup>8,10</sup>. The burden of breast cancer is increasing in both developed and developing countries; the peak occurrence of breast cancer in developed countries is above the age of 40 whereas in India it is above the age of 50<sup>4,5,9</sup>. In India the age standardized incidence rate of breast cancer varies between 9 to 32 per 1,00,000 women<sup>12</sup>. In urban areas of developing countries, breast cancer is the most common Cancer in women and due to increase in life expectancy, urbanization, and Western lifestyles. The incidence has been rising up in low and middle income Countries steadily in the last few years. In all regions of India rise in incidence of breast cancer is 0.5-2% per annum and more in < 45years age group<sup>11</sup>.

Breast cancer is most prominent cancer among the females in Bangalore, Mumbai, Delhi, Bhopal<sup>8</sup>.

Proliferative lesions without atypia are associated with a small increase in the risk of breast cancer (1.5 to 2 times the risk of those who do not have one of these lesions) and include non – atypical (or usual) ductal hyperplasia.

Proliferative lesions with atypia are associated with the greatest breast cancer risk 4 to 5 times higher than average risk. Ductal carcinoma in situ (DCIS) is a spectrum of abnormal breast changes that start in the cells lining the breast ducts. DCIS is considered a noninvasive form of breast cancer because the abnormal cells have not grown beyond the layer of cells where they originated. It is the most common type of in situ breast cancer, accounting for about 83% of in situ cases diagnosed during 2006-2010<sup>13</sup>.

## **MATERIALS AND METHODS:**

A total of 338 cases studied who came to Hamidia hospital Bhopal with chief complaints of lump in breast from April 2014 to march 2015.

### **Inclusion criteria-**

1. All female patients with chief complaints of lump and nipple discharge in breast.
2. Age more than 18 years

### **Exclusion criteria-**

1. Female patients with cyclical mastalgia.
2. Patients with postoperative complications.

Histopathology report is also retrieved from those patients who got operated for CA breast and studied retrospectively with regards to demographic profile and their histological features.

Demographic data and Histopathological details were analyzed. Data were collected and evaluated.

## RESULTS:

Among 338 patients there were 81.3% i.e. 275 patients with benign disorders of breast and rest 18.6% i.e. 63 patients with malignant diseases. Among benign disorders fibroadenosis is most common disease accounting to around 127 patients i.e. 46.1% of cases others include duct ectasia (15.9%), fibroadenoma (13.6 %), breast abscess (12.1 %), phylloids tumor (1.18 %), accessory breast tissue (0.88 %). There were a total of 63 patients with carcinoma of breast and the most common age presentation is between 41 – 50 yrs. of age.

Most common presentation was that of a breast lump, with slightly left side dominance (58.2%, 37/63). Upper outer quadrant was the most frequently involved quadrant (53.9%, 34/63) followed by central quadrant (19%, 12/63). Histopathology showed that infiltrating ductal carcinoma was the commonest variant comprising of 90.5% (57/63) of cases followed by medullary carcinoma (3.17%, 2/63).

Most common stage of presentation was stage IIIa<sup>4,6,14</sup> (38.1%), followed by stage IIIB (31.7%), stage IIB (11.1%), stage IIIC (9.5%), stage IV (4.7%), stage IIA (3.1%).

## DISCUSSION:

In India, the strategies for prevention of breast cancer are required as breast cancer incidence is increasing among women in many regions and is second most common cancer among females<sup>10</sup> The average age of the patient at presentation is between 45 and 50 years<sup>10,16,17</sup>. and similarly observed in present study. The peak age of breast cancer is 60-70 years in western countries and 40-50 years in Asian countries<sup>17</sup>. In present study, nearly 37.9% were below 40 years of age, while 22% cases observed in the study by Saxena *et al*<sup>10</sup>. In comparison to developed countries in Asia and the rest of the world, the incidence of breast cancer is lower; but mortality is significantly higher in developing Asian countries and patients are about 1 decade younger in developing countries than in developed nations<sup>2</sup>. IDC NOS is commonest breast cancer followed by lobular carcinoma in the hospital-based cancer registries in Mumbai, Bangalore, and Thiruvananthapuram<sup>15</sup> Saxena *et al*.<sup>10</sup> and Sandhu *et al*.<sup>16</sup> also observed same, but in present

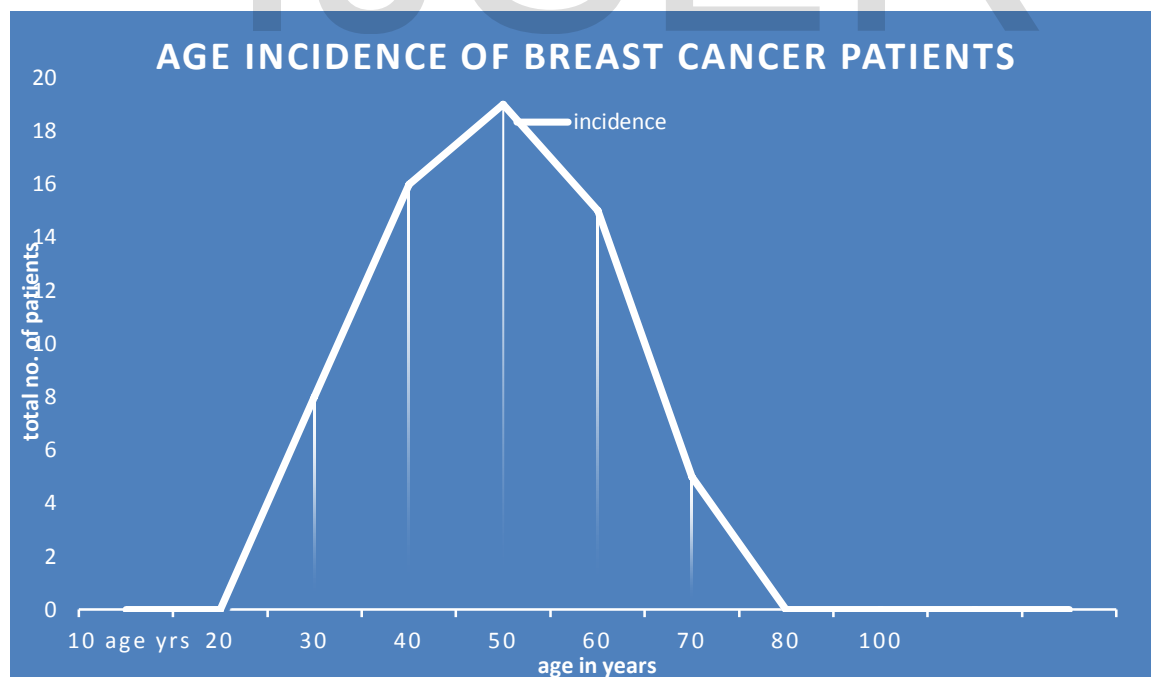
study IDC NOS (90.50%) is commonest breast cancer and medullary carcinoma (3.17%) was second most common variant. Most common TNM stage observed was stage IIIA (28.1%) followed by stage IIA (27.3%) and stage IIB (19.5%) in present study, and distant metastasis was observed in 5.5% cases. Wani *et al.*, observed stage IIB is commonest followed by stage IIIA and stage IIIB<sup>14</sup>. Saxena *et al.*, observed stage IIIB is commonest followed by stage IIIA and stage IIB<sup>10</sup> Majority of breast cancer patients present at relatively late stage in the developing countries probably due to lack of awareness, lack of funding, lack of infrastructure, and low priority in public health schemes<sup>2</sup>.

### CONCLUSION:

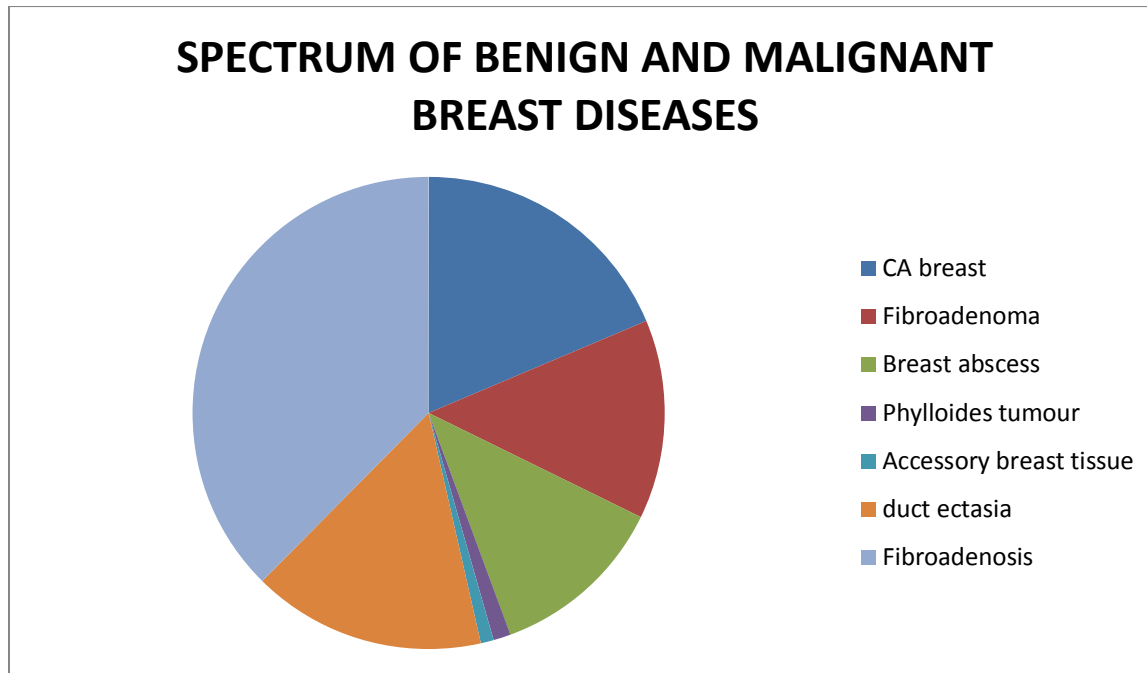
The incidence of breast cancer in India is increasing and basic education and awareness of the women's health, self-breast examination, and clinical breast examination may help increasing awareness and help to identify breast cancer at early stage in developing countries.

### TABLES:

#### 1. AGE WISE INCIDENCE OF BREAST CANCER IN HAMIDIA HOSPITAL BHOPAL:



#### 2. SPECTRUM OF BENIGN AND MALIGNANT BREAST DISEASES



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