

A Prospective Study Of Clinical Profile Of Patients With Carcinoma Breast In A Tertiary Health Care Centre

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ABSTRACT:

INTRODUCTION: Among women, the three most common cancers are those of the breast, the lung and the bronchus. Breast cancer alone is responsible for 32% of the cancer burden in women. Detailed history, clinical examination, and relevant cytopathological investigations can detect breast cancer at an early stage and reduce the morbidity and mortality associated with the disease. Surgical interventions on most patients can prolong life expectancy.

AIM: - the aim is to study the following: -

1. To study various risk factors like Age, Family history, Breast feeding.
2. To study various clinical modes of presentation of breast cancer.
3. To study different mode of surgical management.

METHOD: - This was a prospective & observational study. 100 patients were included between March 2020 and October 2022, who presented with non-healing ulcers at Index medical college. All were subjected to clinical examination using symptoms, signs, lab investigations, and radiological examination with triple assessment. Then operative procedures were planned.

RESULT: - All the age groups were considered in the study and the most common age group was between 41-50 years which is in accordance with other Indian studies but one decade earlier than the western series.

The incidence of breast cancer was 100 % in females there was no male patient, however, the incidence of male breast cancer is variable in different studies from 2% to 6%.

CONCLUSION: - Breast cancer is second most common cause related to death in young females after cervical cancer; hence early detection of breast cancer carries much importance.

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I. INTRODUCTION:-

- Breast cancer is the most common site-specific cancer in Females, and it is the most common reason for death from cancer in females from 20 to 59 years of age.
- Breast cancer among Indian female is with age adjusted rate as high as 25.8 per 100,000 and a mortality of 12.7 per 100,000 females. Mortality-to-incidence ratio is as high as 66 in rural registries whereas as low as 8 in urban registries. Better health awareness and availability to breast cancer screening programmers and treatment facilities would cause a favorable and positive clinical picture in the country.
- Breast cancer affects almost every eighth women in the world and its incidence has been rising in both developed and developing countries. Breast cancer would be either familial, due to numerous known & unknown genetic mutations, e.g., BRCA2, BRCA1, P53, or nonfamilial, linked to predisposing factors like obesity, delayed, early menarche, use of hormone replacement therapy and/or unknown causes.
- Numerous researches indicate that females who use hormonal replacement therapy (HRT), especially for longer than 5 or 7 years also increase breast cancer risk.
- Several studies have shown that intake of selected antidepressants, particularly paroxetine, tricyclic antidepressants and selective serotonin reuptake inhibitors, may be associated with increasing risk of breast cancer.
- According to epidemiological evidence, obesity is associated with greater probability of breast cancer. In addition, researchers observed that higher BMI was associated with more aggressive biological features of tumor, including higher percentage of lymph node metastases and large size. Poorer clinical outcomes are primarily observed in females with BMI ≥ 25 kg/m².
- Numerous evidences confirm that excessive alcohol consumption is a factor that might enhance the risk of malignancies within the gastrointestinal tract; however, it was proved that it is also linked to the breast cancer risk. ^[21]
- Carcinogens found in tobacco are transported to breast tissue, increasing the likelihood of mutations in

oncogenes and suppressor genes (especially p53).

- Vitamins exert anticancer properties, which might potentially benefit in prevention of several malignancies including breast cancer, however, the mechanism is not yet fully understood. Attempts are continually made to analyze the effects of vitamin intake (vitamin C, vitamin E, B-group vitamins, folic acid, multivitamin) on risk of breast cancer, nevertheless, data remains inconsistent and not sufficient to compare results and draw credible data.
- **THE MODIFIED TRIPLE TEST-** In mid-1970 a triple test consisting of clinical examination, mammography and FNAC was introduced which has played a significant role in the diagnosis of breast cancer, later mammography was replaced by an ultrasonogram of the breast, and this was called the modified triple test, then the accuracy of diagnosis was about 99%. Even in lesions that are not palpable the diagnostic yield is like palpable lesions when the triple test is used.
- While mammograms can help to detect cancer before feeling a lump, breast self-exams can help patients to know how to feel a breast lump so that a patient can seek medical advice if there are any changes.

Making a definitive preoperative diagnosis is very important as it helps to plan definitive management. If malignancy is detected by a triple test, two surgeries can be avoided, one for biopsy and the other for curative treatment.

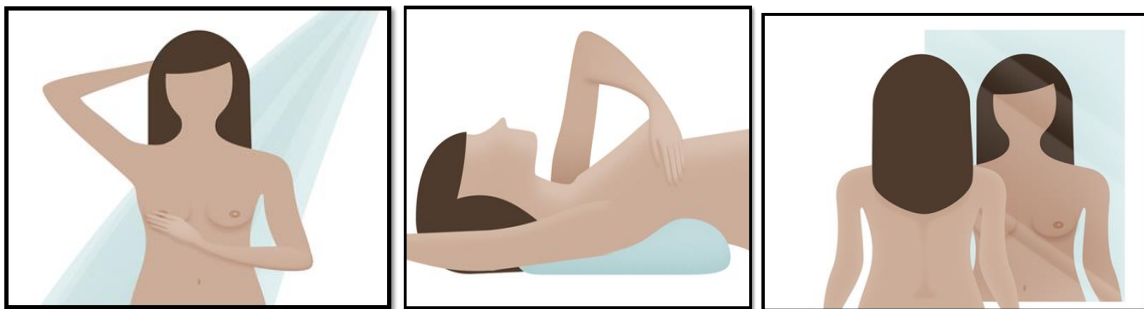


FIGURE :- SELF EXAMINATION

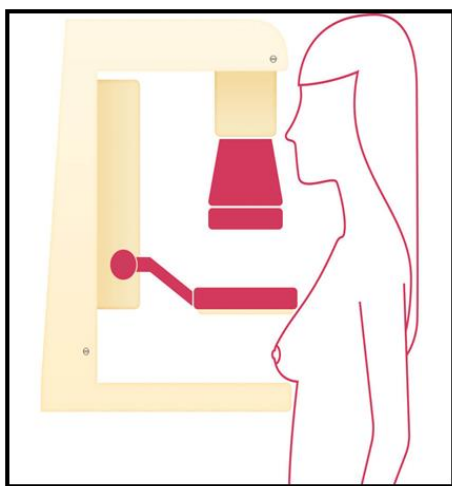


FIGURE:- MAMMOGRAPHY

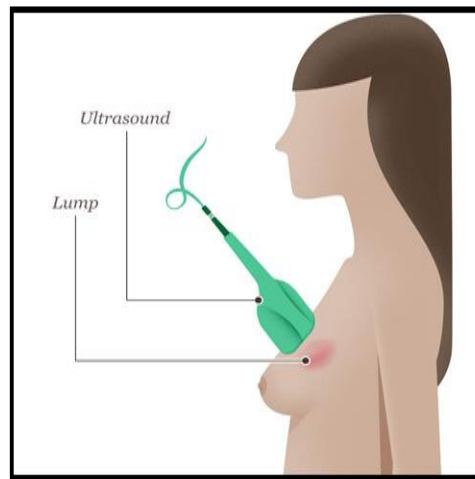


FIGURE :- ULTRASOUND

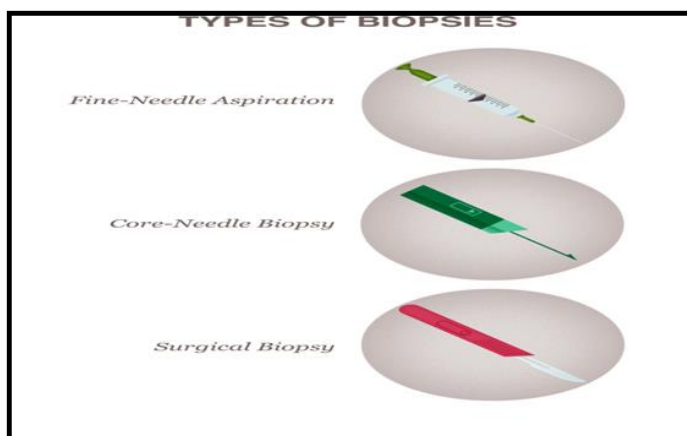


FIGURE :- TYPES OF BIOPSY

SYMPTOMS AND SIGNS OF BREAST CANCER ¹

- Nipple tenderness or a lump near the breast or axillary area.
- Change in contour and/or thickening of the skin on the breast
- Any change in the size or shape of the breast
- Dimpling of the breast
- Any swelling of the breast (especially if on one side only) or shrinkage of the breast (especially if on one side only)
- Recent asymmetry of the breasts. Although it is common for females to have one breast slightly larger than other one, if the incident of asymmetry is recent, it should be checked.
- The nipple that is turned slightly inverted
- The skin of the breast, areola, or nipple that has turned scaly, red, or swollen or has ridges or pitting resembling the skin of an orange (peau d'orange; a French term meaning skin of an orange).
- Pain is a symptom that typically increases in intensity with the growth of the tumor. Besides pain, pressure at different places in the chest can result in the development of painful ulcers and skin abrasions. This can further involve the ribs.
- Fluid discharge is the most important alarming breast cancer symptom, especially when it isn't milky in nature. Milky discharge is normal for breastfeeding patients but the fluid discharge of any other colour from the nipple needs attention, especially blood discharge.
- A swollen lymph node region or a painful lump can also be noticed in the axillary region or around the collarbone.
- The cancer has spread to the lungs which manifests into other symptoms. These include wheezing or hacking coughs.

II . MATERIALS AND METHODS

It is an observational study of the clinical profile of patients with breast cancer in tertiary health cancer. The study was conducted for the duration of 18 months from January 2021 to July 2022 at Index Medical college, hospital and research Centre Indore, in the department of general surgery. 100 patients were taken in this study, who had breast surgeries.

• INCLUSON CRITERIA

1. Patients with breast cancer
2. Patients having report of FNAC and USG
3. Operated cases of breast cancer with contralateral breast cancer
4. Patients with breast cancer with consent for operative procedure

• EXCLUSION CRITERIA

1. Patients with benign breast lump
2. Incomplete records of FNAC and USG
3. Patients who do not want to be the part of the study

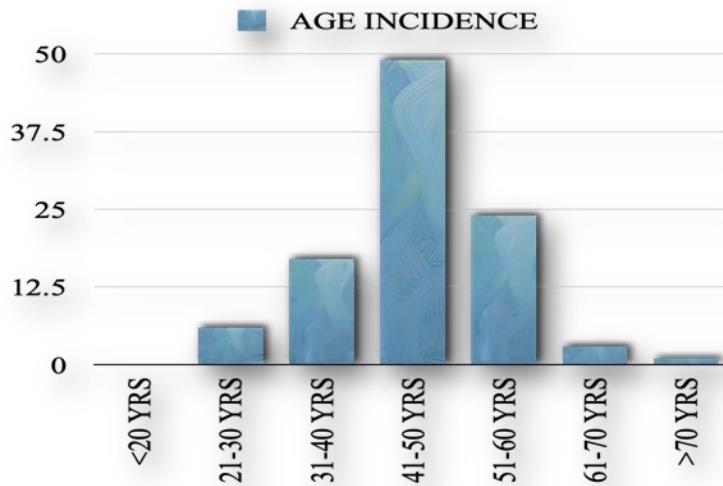
METHODOLOGY:-

A detailed clinical history was elicited from all patients at the time of admission. All patients who

had clinical evidence and FNAC evidence of malignancy were worked up for surgery. The finding and reports obtained were entered in the proforma of all patients. All patients who were willing for mastectomy were explained about the surgery, options of breast-conserving surgery were also given, and breast reconstruction options were also given.

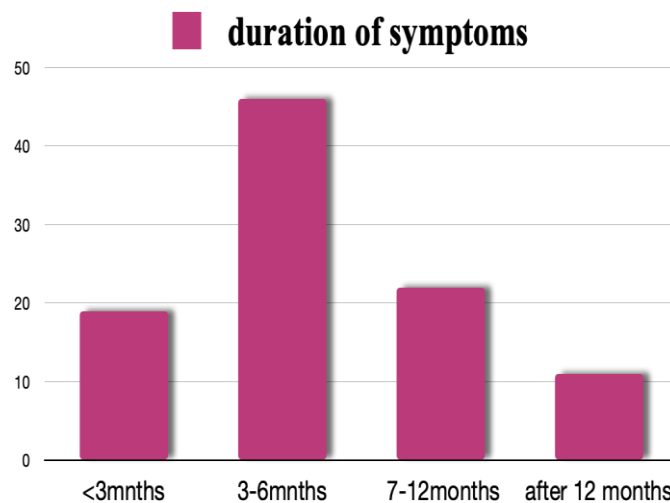
III. OBSERVATION:

1. Age incidence:- Out of the 100 patients, there were no patients below 20 years, 6 patients between the age group of 21 to 30 years, 17 patients were in the age group of 31 to 40 years (17%), 49 patients were in the age group of 41 to 50 years (49%), 24 patients were in the age group of 51 to 60 years (24%), 3 patients were above the age of 60 to 70 years (3%) and only one patient was above 71 years of age. Youngest patient in our study is 21-year-old female and oldest patient is 79-year-old female.



Duration of symptoms

The majority of the patients came to us within 6 months from the onset of the symptoms, among them 19 patients presented before 3 months from the onset of the disease. 46 patients came in between 3 to 6 months from the onset of symptoms. 22 patients came after 7 months and there were only 11 who presented late after 1 year.

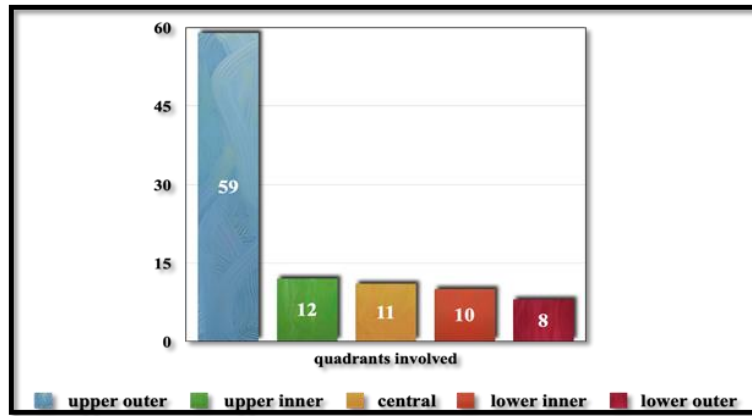


SIDE INVOLVED

Among 100 breast cancer, 64 patients had left breast cancer, 31 patients had breast cancer of right breast and he had 5 patients with bilateral breast cancer.

QUADRANT BREAST INVOLVED

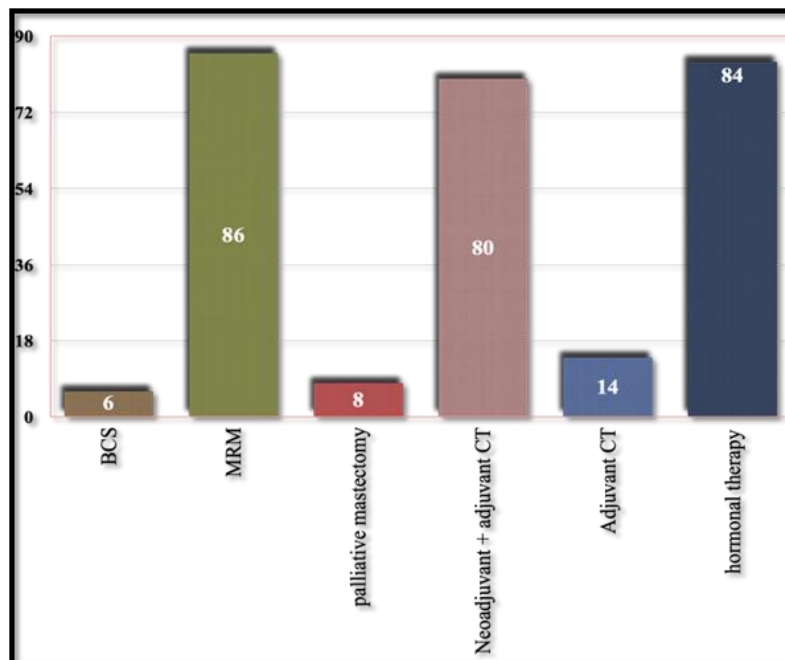
Upper outer quadrant was found to be most commonly involved i.e. 59 out of 100 (59%) followed by upper inner quadrant 12 (12%) followed by lower inner quadrant i.e., 10 (10%), central quadrant 11(11%) least was lower outer quadrant i.e., 8 (8%)



MENSTRUAL STATUS- Out of 100 patients, 59 patients were premenopausal females and 41 were post-menopausal females. Out of 41 menopausal patients, majority of them attained menopause between 50-55 years of age I.e.,18 females, followed by 14 females above 55 years of age and 9 females before 50 years of age.

PRESENTING COMPLAINTS - All the patients in our study with breast cancer presented with chief complaint of breast lump. Other chief complaints like ulcerations were seen in 31 patients, 28 patients had skin changes like fixity, paeu d orange, cutaneous nodes, and nipple retraction. 20 patients had chief complaint of nipple discharge, out of which 11 patients had bloody discharge and 9 patients had a serous discharge. There were only 12 patients who had pain over the lump.

TREATMENT- Surgery was offered to all the patients in my study. Axillary clearance was done in all the cases for nodal involvement even in clinically node-negative cases. 6 out of 100 patients underwent breast conservative surgery with axillary clearance. Among the rest 94 patients, 8 patients who underwent palliative mastectomy had inflammatory breast cancer and 86 underwent MRM. All the patients with nodal involvement were given chemotherapy.



IV. RESULT:-

All the age groups were considered in the study and the most common age group was between 41-50 years which is in accordance with other Indian studies but one decade earlier than the western series.

The incidence of breast cancer was 100 % in females there was no male patient, however the incidence of male breast cancer is variable in different studies from 2% to 6%.

Though nulliparity is an established risk factor for carcinoma breast, in our study, most of our patients were multiparous. There were only 2 patients who were nulliparous as they were unmarried.

Though family history has a strong association with breast cancer, in this study we had only 4 patients who had a family history of breast cancer.

There were 59 pre-menopausal patients and 41 of them were postmenopausal females.

64 Cases had breast cancer on the left side, 31 cases had cancer on right and 5 had bilateral breast disease.

6 patients underwent breast conservative surgery, 86 underwent MRM and the rest 8 underwent a palliative mastectomy as they had advanced stage cancer. 80 patients were offered neoadjuvant chemotherapy followed by another 6-8 cycles of adjuvant chemotherapy.

V. CONCLUSION:-

Breast cancer is second most common cause related to death in young females after cervical cancer; hence early detection of breast cancer carries much importance.

Our study included an assessment of an individual and combined diagnostic accuracy of the three components of modified triple test (clinical diagnosis, USG & FNAC) in patients with palpable breast lump.

The study emphasizes the need for awareness and public education regarding breast carcinoma and its early detection. The simple and effective methods of detecting the disease early like self-breast examination should be made aware among people as screening studies like mammography may not be cost-effective.

Many females experience substantial psychological distress and disruption in their usual routine life. With the help of education and health awareness, individual psychotherapy, family support and group education therapy we can make the life of carcinoma breast patients a better one.

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