A study of clinical profile and factors associated with the patients of breast carcinoma at tertiary health care centre

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Abstract
Background: Cancer has become one of the ten leading causes of death in India. It is estimated that there are nearly 2 to 2.5 million cancer cases at any given point of time in India. **Aims and Objectives:** To Study clinical profile and factors associated with the patients of breast carcinoma at tertiary health care centre. Methodology: This was cross-sectional study in the patients with breast carcinoma in the two year duration i.e. January 2017 to January 2018 in the two year period there were 69 patients admitted for carcinoma of breast. With the written consent all the details of the patients like, age, clinical features and staging of disease and associated factors etc. were noted. All details were entered to excel sheet and analyzed by excel software for windows 10. **Result:** The majority of the patients were in the age group of 31-40 were 36.23%, 41-50 were 24.64%, 51-60 were 21.74%, ≥ 61 were 13.04%, 20-30 were 4.35%. The most common complaints were Lump i.e. 76.81, Pain were -10.14%, Nipple discharge -7.25%, Ulcer- 5.80%. As per the Stage of disease at diagnosis the most common was stage III-50.72%, followed by Stage –IV-21.74%, Stage II was 17.39%, Stage I was 7.25%, Paget's disease was 2.90%. The most common associated factors were Obesity (BMI>30) -33.33%, Age at menarche <13 was 27.54%; Age at first child birth >30 in 21.74%; H/o Induced abortion was 13.04%; Family history was 11.59%. H/o OCP ingestion Was - 10.14%. **Conclusion:** It can be concluded from our study that the majority of the patients were in the age group of 31-40 Yrs. The most common complaints were Lump, Pain, Nipple discharge Ulcer. As per the Stage the most common was stage III, Stage –IV %. The most common associated factors were Obesity Age at menarche <13 Years. Age at first child birth >30 Yrs. H/o, Induced abortion, Family history, H/o OCP ingestion. Etc.
Key Word: Breast cancer, OCP, Obesity.

INTRODUCTION

Cancer has become one of the ten leading causes of death in India.[1] It is estimated that there are nearly 2 to 2.5 million cancer cases at any given point of time in India.[2] Over 7 to 9 lakh new cases and 3 lakh deaths occur annually in India due to cancer,[3] whereas in Karnataka there are about 1.5 lakh prevalent cases of cancer and about 35,000 new cases are added to this every year.[4] Based on the consolidated report of cancer registries the overall common cancer sites in South India are stomach for males and cervix for females.[5,6,7] Breast cancer is the most common diagnosed malignancy in women worldwide (22%) and in India (18.5%) it ranks second to cervical cancer. 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 50 whereas in India it is above the age of 40.[8] In India the age standardized incidence rate of breast cancer varies between 9 to 32 per 1,00,000 women. To generate the reliable data on magnitude and pattern of cancer, India started National cancer registry program in 1981.[9] Upto 2003 the program comprised of six population based

cancer registry and one registry serving rural area covering the total population of 35.7 million (only 3.5% of the Indian total population)[10] and an increasing trend in incidence is reported from various registries of national cancer registry project and now India is a country with largest estimated number of breast cancer deaths worldwide.[11,12] So in our study we have seen clinical profile and factors associated with the patients of breast carcinoma at tertiary health care centre

METHODOLOGY

This was cross-sectional study in the patients with breast carcinoma in the two year duration i.e. January 2017 January 2018 in the two year period there were 69 patients admitted for carcinoma of breast. With the written consent all the details of the patients like, age, clinical features and staging of disease and associated factors etc. were noted. All details were entered to excel sheet and analyzed by excel software for windows 10.

RESULT

Table 1: Age wise distribution of the patients

Age (Yrs.)	No. of patients	Percentage
20-30	3	4.35
31-40	25	36.23
41-50	17	24.64
51-60	15	21.74
≥ 61	9	13.04
Total	69	100.00

The majority of the patients were in the age group of 31-40 were 36.23%, 41-50 were 24.64%, 51-60 were 21.74%, ≥ 61 were 13.04%, 20-30 were 4.35%.

Table 2: Presenting symptoms

Symptoms	Number of patients	Percentage
Lump	53	76.81
Pain	7	10.14
Nipple discharge	5	7.25
Ulcer	4	5.80
Total	69	100.00

The most common complaints were Lump i.e. 76.81, Pain were -10.14%, Nipple discharge -7.25%, Ulcer- 5.80%.

Table 3: Distribution of the patients as per the Stage of disease at diagnosis

Stage	Number of patients	Percentage
Paget's disease	2	2.90
I	5	7.25
II	12	17.39
III	35	50.72
IV	15	21.74
Total	69	100.00

As per the Stage of disease at diagnosis the most common was stage III-50.72%, followed by Stage –IV-21.74%, Stage II was 17.39%, Stage I was 7.25%, Paget's disease was 2.90%.

Table 4: Distribution of the patients as per the associated factors

Associated factors	No.	Percentage (%)
Obese (BMI>30)	23	33.33
Age at menarche <13	19	27.54
Age at first child birth >30	15	21.74
H/o Induced abortion	9	13.04
Family history	8	11.59
H/o OCP ingestion	7	10.14

The most common associated factors were Obesity (BMI>30) -33.33%, Age at menarche <13 was 27.54%; Age at first child birth >30 in 21.74%; H/o Induced abortion was 13.04%; Family history was 11.59%. H/o OCP ingestion Was - 10.14%.

DISCUSSION

Breast cancer is the most common female cancer worldwide. Global burden of breast cancer will increase to over 2 million new cases/year by 2030. The incidence of breast cancer is rising in India (22.9%) and is now the second most commonly diagnosed cancer in women after cervical cancer. The age-standardized mortality rate for breast cancer in India was found to be 11.1/100,000 where globally it was 12.5/100,000 according to International Agency for Research on Cancer report in 2008. Although many risk factors may increase the chance of having breast cancer, it is not yet known just how some of these risk factors cause cells to become cancerous.[1] Risk factors are gender, age, genetic factors, family history, dense breast tissue, menstrual periods, breast radiation early in life, pregnancy at late ages, use of birth control pills, hormone therapy, not breastfeeding, alcohol, obesity, lack of exercise, and induced abortion.[2,3] The risk is greater if a woman attains menstruation before twelve years of age. Menopause after fifty five years of age has an increased risk of ovarian, breast, and uterine cancers. A longer exposure to estrogen increases a woman's risk of breast cancers. Therefore, women who have natural menopause are more likely to develop cancer twice high because of hormonal factors.[3] Breast cancer is the most common female cancer worldwide. Global burden of breast cancer will increase to over 2 million new cases/year by 2030. The incidence of breast cancer is rising in India (22.9%) and is now the second most commonly diagnosed cancer in women after cervical cancer. The age-standardized mortality rate for breast cancer in India was found to be 11.1/100,000 where globally it was 12.5/100,000 according to for a country like India with a huge population, diverse cultures, geographical variations, diets and habits, sources of information on cancer risk factors are considerably limited. The reasons for varying incidence of breast cancer among women are not fully understood, which are likely to be explained by reproductive and lifestyle factors such as Diet, Age at menarche and menopause, Age at first delivery, Abortion,

Family history of Breast Cancer.[13,14,15,16,17,18,19,20,21,22] The majority of the patients were in the age group of 31-40 were 36.23%, 41-50 were 24.64%, 51-60 were 21.74%, ≥ 61 were 13.04%, 20-30 were 4.35%. The most common complaints were Lump i.e. 76.81, Pain were -10.14%, Nipple discharge -7.25%, Ulcer- 5.80%. As per the Stage of disease at diagnosis the most common was stage III-50.72%, followed by Stage –IV-21.74%, Stage II was 17.39%, Stage I was 7.25%, Paget's disease was 2.90%. The most common associated factors were Obesity (BMI>30) -33.33%, Age at menarche <13 was 27.54%; Age at first child birth >30 in 21.74%; H/o Induced abortion was 13.04%; Family history was 11.59%. H/o OCP ingestion Was - 10.14%. These findings are similar to Abbasi S et al they reported significant unadjusted risk of breast cancer for the women with education between more than 7 to 12 years, non-vegetarian diet, age at menarche more than 13 years, age at first child birth more than 30 yearsand induced abortion ($P < 0.05$). The study conducted by Abbasi, *et al.*, reported significant association between age at menarche and breast cancer.[26]

CONCLUSION

It can be concluded from our study that the majority of the patients were in the age group of 31-40 Yrs. The most common complaints were Lump, Pain, Nipple discharge Ulcer. As per the Stage the most common was stage III, Stage –IV %. The most common associated factors were Obesity Age at menarche <13 Yrs. Age at first child birth >30 Yrs. H/o Induced abortion, Family history, H/o OCP ingestion. etc.

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