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## **AGE DISTRIBUTION OF FEMALE BREAST CANCER IN BASRAH 10 YEARS STUDY**

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### **Abstract**

This study was conducted to determine the age distribution and mean age of female. Breast cancer patients from 1991-2000. Reports of breast lumpectomy and mastectomy were reviewed. About 648 reports of patients with breast cancer were found and reviewed for age only. Most patients were in the age group 41-50 years of age. The mean age was 45 years. The study also shows that there has been no change in age distribution and mean age in 10 years period.

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### **Introduction**

Carcinoma of the breast is the most common site specific cancer in women. It is the leading cause of death from cancer for females 40-44 years of age<sup>1</sup>.

In Basrah governorate breast cancer is the commonest cancer among females, and it is the leading cancer cause of death among females in Basrah<sup>2,3</sup>.

The etiology of breast cancer is poorly understood, so there is concern to which risk factors are responsible. Risk for breast cancer is strongly age related. The age specific incidence in each age group display a progressive rise with aging<sup>4</sup>.

This study was conducted to determine the age distribution and mean age of female breast cancer patients in Basrah

from 1991-2000, whether there is any changing pattern in this period and to compare results with other countries.

### **Patients and Method**

The histopathological reports of female breast cancer from 1991-2000 were analyzed according to the age of patients only.

The sources of reports were from Al-Sader Teaching Hospital, Basrah General Hospital, Althareer General Hospital histopathology laboratories, and private laboratory including Al-Wiswasy, Al-Kindy and Al-Qima laboratories.

Only newly diagnosed cases were included and all recurrent cases were excluded from the study. Total number of patients was determined in each year and patients were divided into groups according to their age and the mean age was calculated for each year.

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## Results

About 648 histopathological reports were studied, unfortunately 3% were excluded from the study either because no age was recorded or more than one age was found i.e. the lumpectomy report record a different age than the mastectomy report. Fig 1 shows the total number of cases registered each year. The least number (32 cases) registered was in the year 1991 and the maximum number (100 cases) was registered in the year 2000.

Table I shows distribution of cases according to age group. In all studied years the majority of cases (27-41% ) were in the age group 41-50 years of age except in the year 1994 (in which 42% of cases were in the age group 31-40 years of age) and in the year 1996 (in which number 31% registered in two age groups 41-50 and 51-60 years). The second common age group (22.9-32% of cases) was in the age group 31-40 years of age. Therefore there were 70.6% of cases below 51 years of age i.e. the post menopausal tumours is much less than premenopausal tumours.

Fig 2 shows the age distribution curve in the studied years. There is steady increase in number of cases from second decade of life, peak in fifth decade and decrease thereafter.

The mean age was calculated in each age group as shown in Table II. The mean age ranges from 41-46 years of age and mean age of all cases in 10 years was 45 year.

## Discussion

Researches all over the world are making breast cancer prevention and treatment their priority and in order to create a

cancer control program, we must focus in cancer causation and risk factors. So far no documented risk factor for breast cancer apart from age and gender. About 75% of females who develop breast cancer have no risk factor apart from age<sup>5</sup>.

Carcinoma of the breast is extremely rare below the age of 20, but thereafter the incidence steadily rises and by the age of 90 nearly 20% of women are affected<sup>6</sup>. There is a fall of in incidence during menopause which has led some to believe that there are two distinct types of breast cancer, affecting pre menopausal and post menopausal women. This is unproven<sup>7</sup>.

In this study it has been shown clearly that most cases were in the age group 41-50 years of age. This is similar to the reported age in Arab and Muslim countries as Saudi Arabia<sup>8</sup>, Jordan<sup>8</sup>, Kuwait<sup>10</sup>, Bahrain<sup>11</sup> and Pakistan<sup>12</sup>, but it is much lower than that of western countries<sup>13</sup>. The second common age group is 31-40 years of age in our province, while it is 51-60 years of age in Saudi patients<sup>8</sup>. In this study 70% of patients were below 51 years of age, which is higher than in Saudi study (60%)<sup>8</sup>, Bahrain study<sup>11</sup> and Jordanian study<sup>14</sup>. So it seems we have the largest percent of premenopausal breast cancer patients. Is it because we are a growing population or we have neglected post menopausal patients or simply because we have different tumour behavior? remain to be determined.

The mean age of patients with breast cancer was 45 years of age which is comparable to Saudi patients (43.49), Bahrain's patients (50.7), but much lower than western countries<sup>15</sup>.

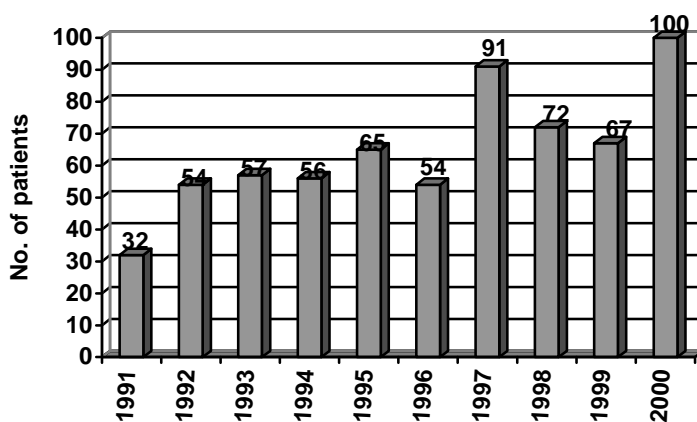
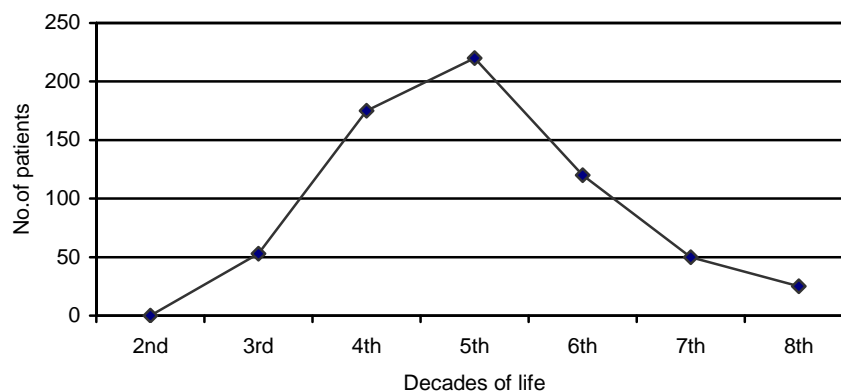


Fig. 1: Total number of cases registered each year

Year	Age group		21-30		31-40		41-50		51-60		61-70		≥ 71	
	≤ 20	%		%		%		%		%		%		%
1991	-		5	14.7	11	32	13	38	4	11.7	1	2	-	-
1992	-		5	8.7	18	31.5	21	36.8	4	7	8	14	1	1.7
1993	-		5	8.9	17	30.3	19	33.9	3	5.3	8	14.2	4	7.1
1994	-		1	1.8	24	42	20	37	4	7	3	5.5	2	3.7
1995	1	1.5	3	4.5	17	25.7	18	27	16	24	7	10.6	4	6
1996	1	2	4	8	11	22.9	15	31	15	31	6	12.5	-	-
1997	1	1	14	15.7	21	23.5	25	28	21	23.5	4	4	3	3
1998	-		4	5.8	19	27.9	28	41	11	16	4	5.8	2	2.9
1999	-		2	3	16	24.6	24	36.9	15	23	6	9	2	2.9
2000	-		11	12.7	20	23	29	33.7	18	20.9	3	3	5	5.8
Total	3		54		174		212		115		50		23	

Table I: Distribution of cases according to age group in each year



**Fig. 2: Age distribution curve**

Year	Mean age
1991	40.7
1992	45.6
1993	44
1994	43.7
1995	47.9
1996	47.6
1997	43
1998	45.5
1999	46.3
2000	46

**Table II: Mean age 1991 – 2000**

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