

**BREAST CANCER IN KIRKUK, IRAQ. A REVIEW  
OF 170 BREAST CANCER FEMALES (PERSONAL VIEW).****Nahrain John Aziz**MB,ChB, FRCS, Department of General Surgery, Azadi General Hospital, Kirkuk, Iraq.  
e-mail address: nj\_aziz8@yahoo.com**Abstract**

Breast cancer is the most common cancer in Iraq as well as other parts of the world. In Western world, the progress in public education and screening program had led to early detection of the disease which led to good prognosis. Appearance of late stages of breast cancer reflects the need for active screening and public education programs. The aim of this retrospective study is to report the pattern of breast cancer in 170 women in Kirkuk province in relation to age, stage of disease at first presentation and histopathology during nine years period (Jan.1994 – Jan.2003).

This is a prospective and retrospective study underwent at Breast Clinic, Azadi General Hospital, Kirkuk, Iraq.

Patients were 170 women with histopathological diagnosis of breast cancer. Out of the 170 women with breast cancer (61.7%) presented between ages 20-50 years and (38.1%) between ages 51-80 years. Regarding stage of disease on first presentation, (62.3%) of the patients had late stages of the disease (stage III and stage IV) while only (37.6%) presented at early stages (stage I and stage II). No stage 0 detected in this study. The commonest histopathology was infiltrating duct carcinoma (74.1%).

In conclusion, breast cancer in Kirkuk is detected in young women and in late stages on first presentation. These results highlight the need for increased community awareness about breast cancer and the need for early detection.

**Introduction**

**B**reast cancer is a significant health problem in industrialized western world where it is the most common form of cancer among women in North America and almost all of Europe. The incidence of breast cancer is increasing in both developed and developing countries. In United States, for instance, the incidence rate for breast cancer has increased steadily 1-2% per year since 1960. At the same time breast cancer is the disease of old age women in western countries<sup>1</sup>.

According to the World Health Organization, eastern mediterranean regional office database, breast cancer represent 10% of all cancers diagnosed worldwide annually and constituted 22%

of new cancers in women in 2000, making it by far the most common cancer in women. In addition it is the most common malignancy in eastern mediterranean countries, compromising 12%-30% of all cases<sup>2</sup>.

Breast cancer is the most common cancer in all provinces of Iraq including Kirkuk province. It is the leading cancer among other cancers in Iraq (14.3%), and in addition it is the prevalent cancer in women (30%)<sup>3</sup>.

In western world, the progress in public education and the screening program for breast cancer including periodical breast self-examination, periodical physical examination and periodical Mammography examination lead to the early

detection of the disease (Stage 0, I, II) and this will lead to good prognosis. On the other hand most studies done in Middle East shows that the percentage of late breast cancer (stage III and IIII) is high, this reflect the need for active screening and public education programs<sup>4</sup>.

The Aim of this study is to present a personal experience with breast cancer cases in relation to their age, stage of the disease and histopathology of 170 cases at first presentation.

### Patients and Methods

This prospective and retrospective study reviewed 170 female patients with histological diagnosis of breast cancer. All of them were treated in Kirkuk Breast Clinic during a period of 9 years (Jan.1994-Jan.2003).

Kirkuk province is located in the north east of Iraq, with a female population of around 394.894 out of which 279.450 are living in Kirkuk city and 115.444 living in the rural areas of Kirkuk province<sup>5</sup>. All the patients were studied in relation to their age, stage of the

disease on first presentation and histopathology of the tumor.

The data was collected from the Breast Clinic in Kirkuk and from the sole pathological laboratory which serves Kirkuk city. The diagnosis of the cases was done on the basis of the triple diagnosis of breast cancer which involved clinical examination, mammo-graphy/sonography and fine needle aspiration cytology/open biopsy.

### Results

During the nine years study period, 170 female breast cancer patients were diagnosed. Their ages, stage of disease at presentation, and biopsy reports were studied. The age of the patients at first presentation ranged from 20 to 80 years with an average of 47 years. The age distribution is shown in table I. There was no single case which presented before the age of 20 years. This study revealed younger patients had breast cancer more than older ones, since 105 patients (61.8%) presented before the age of 50 years, while 65 cases (38.2%) presented after that.

Age group	Number of patients	Percentage
Age group 20-30 years	7	4.1%
Age group 31-40 years	47	27.7%
Age group 41-50 years	51	30%
Age group 51-60 years	46	27%
Age group 61-70 years	13	7.7%
Age group 71-80 years	6	3.5%
Total	170	100%

Most of the patients presented late at their first presentation. One hundred and six patients (62.4%) presented in stage III and stage IV at first presentation

while the remaining 64 patients (37.6%) presented earlier at stages of I and II as demonstrated in table II.

Stage of cancer	Number of patients	Percentage
I	17	10%
II	47	27.6%
III	91	53.6%
IV	15	8.8%
	170	100%

The histopathology of the surgically excised tumors revealed invasive cancer in the majority of the patients. Infiltrating duct carcinoma constituted the major type (76.5%) of cases. It was the leading tumor among other tumors.

Next in incidence was infiltrating lobular carcinoma which occurred in (17.1%) of cases. Medullary carcinoma, colloid carcinoma, and tubular carcinoma occurred in (4.1%), (1.7%), (0.6%) of cases respectively as shown in table III.

Histopathology	Number of patients	Percentage
Infiltrating duct carcinoma	130	76.5%
Infiltrating lobular carcinoma	29	17.1%
Medullary carcinoma	7	4.1%
Colloid carcinoma	3	1.7%
Tubular carcinoma	1	0.6%

## Discussion

Most studies on breast cancer in Middle East countries focused on the epidemiological aspects of the disease which is similar in most countries of the area<sup>6</sup>. Patients with breast cancer in this study tend to be in younger age group. It occurred in (61.7%) of patients before the age of 50 years. This tendency is similar to other studies done in Egypt, Kuwait, Jordan and other countries in the region<sup>4,6,7</sup>, unlike in the United States of America where women aged 50 years and older are the most commonly affected<sup>2</sup>. This is because of the population pyramid in Middle East countries and not because of higher rates among younger age groups. Alike, the

patients in this study presented in late stages of the disease when seeking medical advice which is again similar to the above studies in the region. It is not well understood whether this delay in presentation is due to cultural and social customs or due to more aggressiveness of the disease in this part of the world.

The late presentation of the patients in this study and the absence of in-situ carcinoma highlight the need for increased community awareness about breast cancer and the need for early detection. It is now the time to work on mass screening programs including periodical mammography and periodical physical and breast self-examination.

## References

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