

Breast Lumps in Basrah: A retrospective Study⁺

أورام الثدي في البصرة: دراسة استيعادية

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Abstract:

This is a retrospective study of breast biopsy specimens received during ten years period ending in 1992 in the department of pathology in Basrah general hospital. It includes 954 specimens from female patients and 55 specimens from male patients. In females, malignancy was found in 383 cases (40%). The histological diagnoses were, invasive ductal carcinoma (84%), invasive lobular carcinoma (5%), Medullary carcinoma (4%), intraductal carcinoma (3%), cystosarcoma phylloides and other sarcomas (4%). The commonest benign lesions were fibroadenomas (48%), fibrocystic disease (26%), mastitis (11%) and ductectasia (10%). In males, gynecomastia was diagnosed in 51 cases (93%), while only four cases (7%) were carcinoma.

الخلاصة:

تم تنفيذ هذه الدراسة الاستيعادية بإجراء الفحص النسيجي لجميع خزعات الثدي النسيجية التي تم استلامها خلال عشرة سنوات تنتهي في اليوم الأخير لسنة ١٩٩٢ وذلك في قسم الأمراض في مستشفى البصرة العام. وتضمنت الدراسة فحص ٩٥٤ خزعة نسيجية استلمت من المرضى الإناث إضافة إلى ٥٥ خزعة نسيجية من المرضى الذكور. تم تشخيص الأورام الخبيثة لدى الإناث في ٣٨٣ حالة (٤٠%) من العدد الكلي للخزعات المفحوصة. وكان التشخيص النسيجي لها: الأورام القنوية السرطانية الاجتياحية (٨٤%)، الأورام السرطانية الفصيصية الاجتياحية (٥%)، الأورام السرطانية النخاعية (٤%)، الأورام السرطانية الداخلة

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قنوية (3%) و الورم السرطاني الورقاني وغيره (4%). بينما كان اكثر انواع الأورام الحميدة هو الورم الغددي الليفي (84%)، تلاه

مرض التكيس الليفي للثدي (26%) ثم التهاب الثدي (11%) و آفة التوسع القناوي (10%). أما المرضى الذكور فقد شخصت آفة الثدي الأثنوي في 51 حالة (93%)، بينما شكلت الأورام السرطانية (7%).

Introduction:

Breast cancer is a disease that causes anxiety and fear among all women. It was called the foremost cancer since it is the most fatal, most feared and self-discovered cancer. It is a cancer for which most surgical operations are performed and most radiotherapy and chemotherapy are administered(1,2). The incidence of breast cancer continues to increase. It is the commonest cancer in USA today accounting for 4% of all deaths and 29% of cancers among women (1,3).

In Iraq breast cancer remains the most common tumour in females accounting for more than 24% of the registered female cancers , there is an increase in the frequency of breast cancer as well as its diagnosis in the younger age females (4).

The present study intends to evaluate and establish a baseline for the problem of breast cancer concerning the histological types and the age distribution of breast lumps in general in Basrah province.

Materials and Methods:

Breast biopsies and mastectomy specimens processed for histopathology during ten years period extending from 1983 to the end of 1992 in the pathology department in Basrah were reviewed. Case records of 1009 cases were carefully analyzed concerning the age and sex. The histological sections of each case were collected and reexamined. Histological diagnoses were classified according to the World Health Organization histological typing of breast cancer.

Results:

A total of 1009 breast biopsy and mastectomy specimens have been reviewed and analyzed. They include 954 specimens from female patients and 55 from males. This number represents 2.6% of the total specimens received during the 10 years period studied. Of the 954 female cases , benign lesions were found in 571 (60%) and malignant lesions 383 (40%). Fibroadenomas were the commonest benign lesions comprising 275 cases (48%), followed by fibrocystic disease 151 cases (26%), mastitis 60 cases (10.5%) and mammary ductectasia 54 cases (9.5%). Invasive ductal

carcinoma was the commonest histological type diagnosed comprising 321 cases , which represents 84% of all malignant lesions in the study,(Table 1).The majority of the malignancies were found in the age group between 31-60 years. The mean age for the invasive carcinoma was 48 years. About 52% of these patients had lymph node metastases.

Table 2 Shows the frequency and the age distribution of all female breast lesions . The youngest was 13 years and the oldest was 78 years old. The mean age for Fibroadenomas was 24 years and that for fibrocystic disease was 37 years.

Table (3) shows the frequency and age distribution of the 55 male cases in this study. Four lesions were invasive ductal carcinoma, the mean age of which was 56 years and a range of 45-70 years. Gynecomastia was diagnosed in the remaining 51 lesions, the mean age was 38.5 years and range was 12-74 years.

Discussion:

The mean age of patients with breast carcinoma in the present study is 48 years with a highest frequency between 31 and 60 years. This finding is lower than the means mentioned by others (5,6,7,8).This means that breast carcinoma occurs at a younger age. However table 2 and figure 1 show that carcinoma of the breast remains at high frequency till 60 years of age after which its incidence declines.

The mean age of fibroadenoma was 24 years in this study . Haagensen reported a mean of 31 years whereas Giacomelli in a series of 496 cases reported a mean of 21 years (8,9). In fibrocystic disease of the breast the mean age was 38 years and highest frequency between 21 and 50 years after which it falls. Therefore it is a disease condition seen mainly in the reproductive period of life, such a finding is consistent with other authors (5,6,8).

It is found here that three diseases are responsible for about 80% of all breast lesions studied were invasive ductal carcinoma, fibroadenoma and fibrocystic disease. Figure 1 shows that fibroadenoma is the most common cause of breast lumps in the younger age group (11-30) years. Fibrocystic disease predominates in the (20-40) years group and carcinoma mostly seen in (30-60) years females.

In females ,the incidence of breast carcinoma ranged from 21-42% (10,11). The majority of these lesions were of invasive ductal type(75-85%) (8,12,13,14). These findings are in consistence with this study as malignant tumours comprised 40% of the total cases, and invasive ductal carcinoma accounting for 84% of all malignant lesions, (Table1). However, invasive lobular carcinoma comprised 5% , which is consistent with

other authors (15,16). However ,an incidence of 11% was reported by the Iraqi Cancer Registry (4).Medullary carcinoma was found in 4% of cases in this study ,whereas an incidence of 2-7% was reported.

In the present study , the commonest benign breast lesions diagnosed were fibroadenomas (48%) and fibrocystic disease(26%).On the other hand, other studies reported that fibrocystic disease was the commonest cause for benign lesions of female breast(5,7,8).In males, only gynecomastia and invasive ductal carcinoma were diagnosed. Gynecomastia was found in 51(93%) and mean age was 38 years ,while carcinoma was found in 4 (7%) with a mean age of 56 years. Gynecomastia and carcinoma are regarded by many authors as the commonest breast lesions of male breast and carcinoma is rarely seen in males representing only 1% of breast cancers. However a high incidence (6.4%) was reported in Egypt which was attributed to the increased incidence of gynecomastia there.

Table (1): Malignant lesions of female breasts diagnosed in 10 years

| <i>Histological Diagnosis</i> | <i>Number</i> | <i>%</i> |
|-----------------------------------|---------------|-------------|
| Invasive ductal carcinoma | 321 | 84% |
| Invasive lobular carcinoma | 20 | 5.2% |
| Medullary carcinoma | 17 | 4.4% |
| Intraductal carcinoma | 10 | 2.6% |
| Paget's disease | 2 | 0.5% |
| Cystosarcoma phylloides | 7 | 1.8% |

| | | |
|-----------------------|------------|-------------|
| Other sarcomas | 5 | 1.3% |
| Lymphoma | 1 | 0.2% |
| Total | 383 | 100% |

Table (2): frequency and age distribution of breast lesions in females in 10 years.

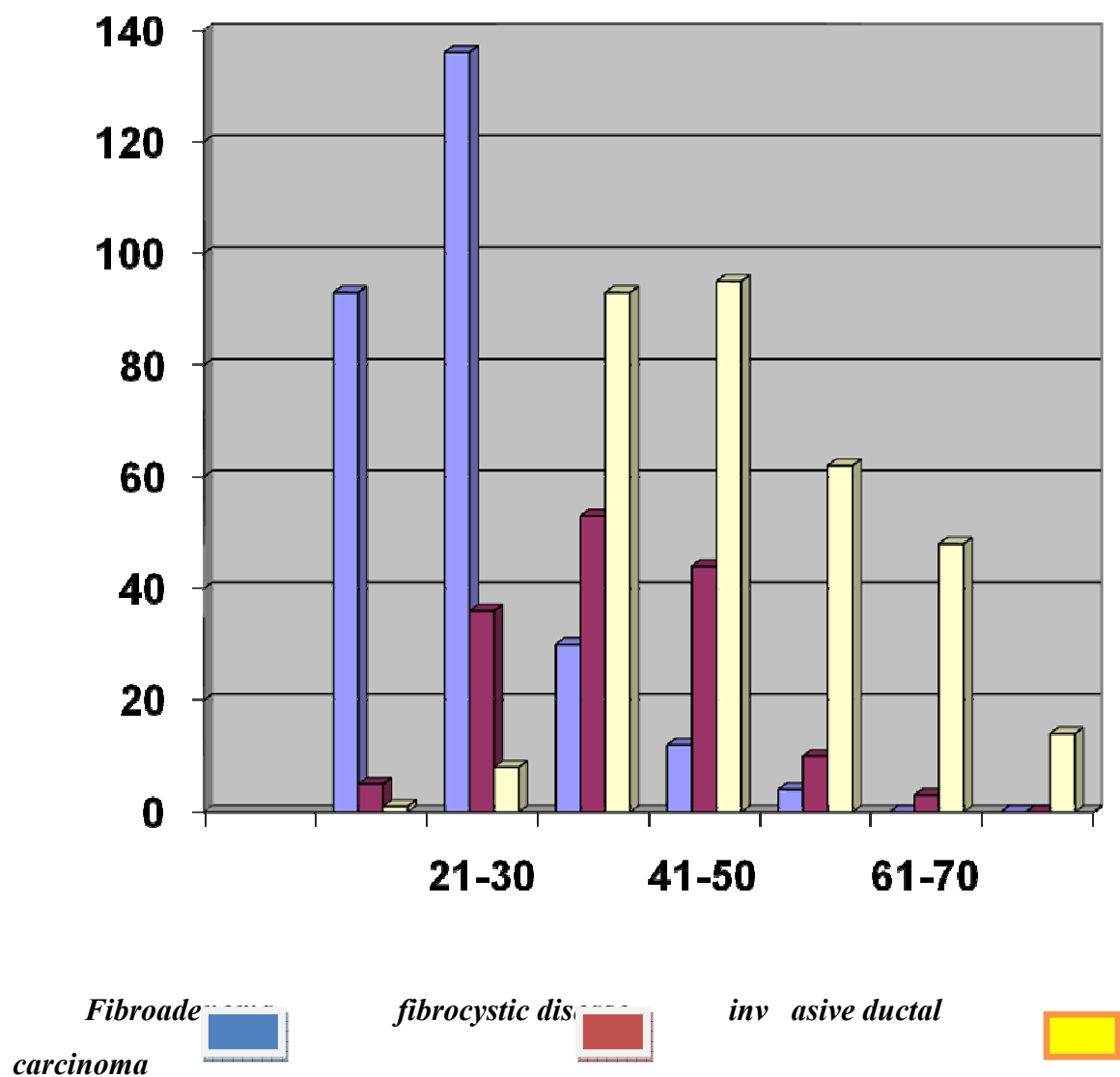
| <i>diagnosis</i> | 11-20 | 21-30 | 31-40 | 41-50 | 51-60 | 61-70 | 71- | Total | % |
|----------------------------|-----------|------------|-----------|-----------|-----------|-----------|-----------|------------|--------------|
| Fibrocystic disease | 5 | 36 | 53 | 44 | 10 | 3 | 0 | 151 | |
| Fibroadenoma | 93 | 136 | 30 | 12 | 4 | 0 | 0 | 275 | 28.8% |
| Mastitis | 2 | 18 | 21 | 13 | 6 | 0 | 0 | 60 | 6.3% |
| Ductectasia | 1 | 10 | 24 | 18 | 1 | 0 | 0 | 54 | 5.7% |
| Fat necrosis | 1 | 4 | 3 | 1 | 2 | 0 | 0 | 11 | 1.2% |
| Galactocele | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0.1% |
| Hydatid cyst | 1 | 3 | 2 | 0 | 0 | 0 | 0 | 6 | 0.6% |
| Duct papilloma | 1 | 2 | 2 | 1 | 3 | 0 | 0 | 9 | 0.9% |
| Lipoma | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 4 | 0.4% |
| Invasive ductal ca | 1 | 8 | 93 | 95 | 62 | 48 | 14 | 321 | 33.6% |
| Invasive lobular ca | 0 | 4 | 7 | 8 | 1 | 0 | 0 | 20 | 2.1% |
| Medullary ca | 0 | 1 | 5 | 8 | 3 | 0 | 0 | 17 | 1.8% |
| Pagets disease | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 2 | 0.2% |

| | | | | | | | | | |
|-----------------------|------------|------------|------------|------------|-----------|-----------|-----------|------------|-------------|
| Cystosarcoma | 0 | 2 | 4 | 1 | 0 | 0 | 0 | 7 | 0.7% |
| Other sarcomas | 2 | 1 | 1 | 1 | 0 | 0 | 0 | 5 | 0.5% |
| Lymphoma | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0.1% |
| Intraductal ca | 0 | 1 | 2 | 4 | 3 | 0 | 0 | 10 | 1.1% |
| total | 107 | 230 | 250 | 206 | 96 | 51 | 14 | 954 | 100% |

Table 3: frequency and age distribution of the male breast lesions

| | Age periods (years) | | | | | | | |
|----------------------------|---------------------|-----------|----------|----------|----------|----------|----------|-----------|
| Diagnosis | 11-20 | 21-30 | 31-40 | 41-50 | 51-60 | 61-70 | 71- | |
| <i>Gynecomastia</i> | 8 | 16 | 6 | 5 | 6 | 8 | 2 | 51 |
| <i>carcinoma</i> | 0 | 0 | 0 | 1 | 2 | 1 | 0 | 4 |
| <i>Total</i> | | | | | | | | 55 |

Figure (1) Age frequency distribution of the common lesions of female breasts



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