

## Spectrum of breast diseases in a Teaching hospital in Al Najaf

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### Summary:

**Background:** The morphological features of the breast undergoes substantial change between early adolescence and menopause which may result in fibrocystic changes, fibroadenoma, mastitis, breast abscess, and carcinoma. The aim of this paper was to find out the incidence of breast diseases managed at Al Najaf teaching hospital.

**Patients and methods:** From January 1987 until the end of Jan 1988, 76 patients with various breast diseases were managed at Al Najaf teaching hospital. A detailed history and physical examination were used to evaluate systematically the entire breast. There was no mammography or FNAC at that time. Definitive diagnosis depended on incisional or excisional biopsy.

**Results:** Fifty three patients (69.7%) had acute bacterial mastitis. Out of fifty three patients with acute bacterial mastitis, thirty eight patients had breast abscess. Thirteen patients (17.1%) had carcinoma of the breast, six patients (7.9%) had fibroadenosis, two patients (2.6%) had fibroadenoma. One patient (1.3%) had galactocele and one patient (1.3%) had hydatid cyst of the breast.

**Conclusion:** Acute bacterial mastitis and breast abscess during pregnancy and lactation were the commonest breast diseases followed by carcinoma of the breast. Fibroadenosis and fibroadenoma had low incidence.

**Keywords:** Acute bacterial mastitis, breast abscess, carcinoma, fibroadenosis.

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### Introduction:

The morphological features of the breast undergoes substantial changes between adolescence and menopause (1). The spectrum of normal histological features varies, features that exhibit mainly patterns of fibrocystic changes and cyst formation formerly called fibrocystic disease of the breast is now under the term ANDI. The fibrocystic changes detected clinically entail no increased risk of breast cancer (2).

In women between adolescence and mid twenties the breast may respond to hormonal stimuli in an exaggerated fashion with the development of single and multiple palpable fibroadenoma (3). The most common benign breast problems in pregnancy and puerperium form a continuum of infectious complications. This may result in mastitis and breast abscess. In women between the middle of the fourth decade of life and menopause, glandular tissue undergoes further hypertrophy in association with an increase in stromal tissue. A higher prevalence of cyst formation is associated with late menopause (4). Progression to malignant disease in breast lesions are believed by many investigators to progress in a linear fashion from usual ductal hyperplasia to atypical ductal hyperplasia and then to ductal carcinoma in situ and then invasive cancer (5).

The aim of this paper was to find out the spectrum of various breast diseases and, their incidence, in patients attending Al Najaf teaching hospital.

### Patients and Methods:

Seventy-six patients were seen at the department of surgery

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During one year, all females, although the number of patients with breast diseases were small, it reflects the proportion of various breast diseases in a community attending a general hospital. There were no facilities for mammography or FNAC. The following protocol for management was done.

All relevant data were recorded on a form until the final diagnosis was reached.

Patients in whom the clinical diagnosis was bacterial mastitis with deep abscess formation were admitted to the hospital, had drainage under general anaesthesia and were given a course of cloxacillin.

Patients who presented with a history of bacterial mastitis of few weeks duration and had been taking antibiotics presented with a solid lump in the breast, a wedge biopsy was taken.

Patients with a discrete solid lump in the breast excisional biopsy was done for small lumps and a wedge biopsy for large lump.

### Results:

During the one year period 76 patients were seen, all females. The age distribution is shown in table 1. The majority of breast diseases occurred between 21-50 years. The mean age of carcinoma was 41.5 years. Fifty three patients had bacterial mastitis of these patients 50 were lactating. Thirteen (17.1%) patients had carcinoma of breast. Six patients with Fibroadenosis (7.9%). Two patients (2.6%) had fibroadenoma. There was one (1.3%) patient with hydatid cyst of breast, and one patient with Galactocele. Table (2). Fig 1. The left breast is affected more by diseases than the right breast and the upper outer quadrant is affected most. Fig 2.

Table 1: The age distribution of common breast

Disease	Age	15-20	21-30	31-40	41-50	51-60
Infection			39	6	8	
Carcinoma			3	3	5	2
Fibroadenosis	1			1	4	
Fibroadenoma			1	1		
Galactocele			1			
Hydatid cyst			1			

Table2: Distribution of breast diseases in 76 patients

Clinical & Pathological Diagnosis	No. of patients	%
Bacterial Mastitis	53	69.7
Carcinoma	13	17.1
Fibroadenosis	6	7.9
Fibroadenoma	2	2.6
Galactocele	1	1.3
Hydatid cyst	1	1.3

Fig1 Distribution of breast diseases Clinico-pathological diagnosis

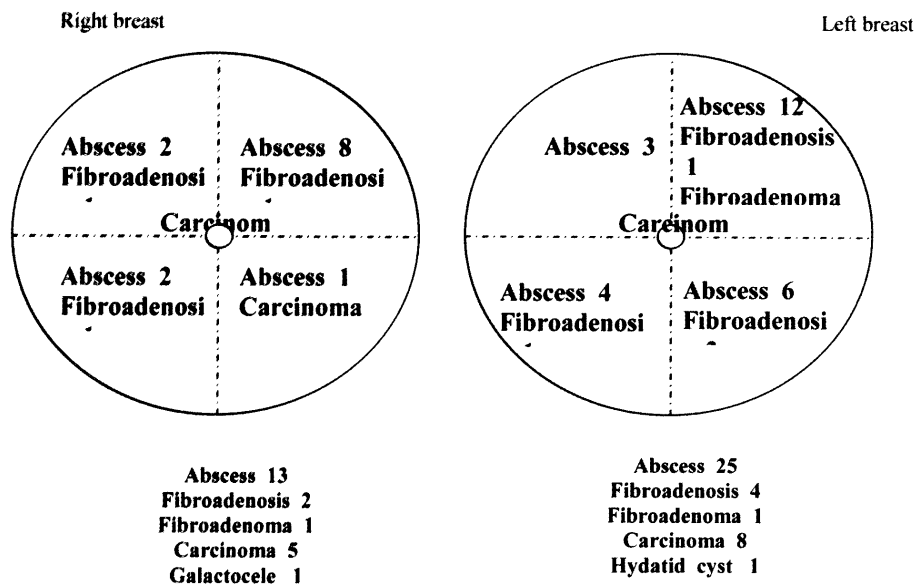
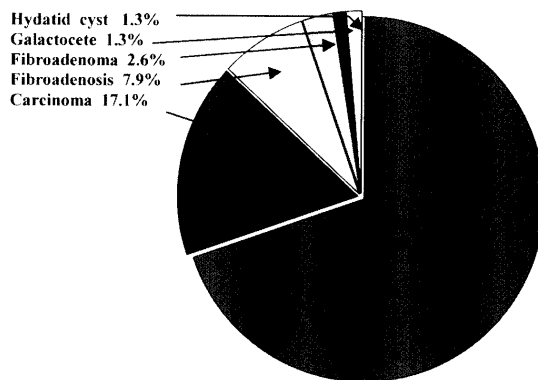


Fig.2 Distribution of breast diseases in Right & Left breast

**Discussion:**

Bacterial mastitis was the most common breast disease, of 53 cases of bacterial mastitis 38 presented with abscess formation which required drainage and all of these patients were lactating. Prolonged lactation, the reserved nature of the society, ignorance and bad hygiene play an important role in the cause of infection.

Sengupte et al (6) reported that of 304 patients seen in breast clinic in Riyadh 40 presented with abscess formation, the high number of patients with abscess in this study can be explained by the fact that the patients with bacterial mastitis are either badly treated or presented late for treatment.

Carcinoma of the breast was the second most common disease, out of 76 patients 13 (17.1%) had carcinoma of breast. Cox et al (7) in a prospective study of patients with breast diseases attending the surgical out patient Dept reported an incidence of 12% with carcinoma. In the present study carcinoma occurred in younger age group the mean age was 41.1.

According to the results of Iraqi cancer Registry(8) (1989-1991), carcinoma of the breast ranks first among the common systems involved. The mean age was 44.1 years.

Stirling et al (9) reported in 1000 malignant lesions of the breast in Saudi Arabia the mean age was 45.5 year.

Out of all benign breast lesions Fibroadenosis was third common lesion with incidence 17.9%. Lindgren (10) & Frantz et al(11) reported from autopsy material that the real incidence of this disease is much higher than that which is diagnosed clinically.

Fibroadenoma was the fourth common breast disease with incidence of 2.6%. Heagensen (12) reported that the order of frequency of breast disease reported in white races was Fibroadenosis, Carcinoma, and Fibroadenoma.

Raju et al (13) reported that Fibroadenoma is the most common breast lesion in black population.

Among other breast diseases there was one patient with hydatid cyst of the breast. AL-Sakal (14) reported in a retrospective study of 150 cases of hydatid cyst in Mosul, there were 3(2%) patients with hydatid cyst of the breast.

The left breast was affected more by all diseases than the right breast.

The upper outer quadrant of the left breast was most affected part, the real reason is not known, further study in this matter is needed.

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