

## Breast Carcinoma Presenting As Abscess

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**Summary** A prospective study of 110 patients who presented with breast abscess to Basrah General Hospital from Jan. 1990 to Dec. 1995. Twelve cases were found to represent carcinoma of the breast on histopathological examination. It is recommended that biopsies should be taken from certain groups of females presenting with breast abscess.

### Introduction

Breast cancer is the second most common cancer in females and the second cause of death from malignancy in women<sup>(1,2,3)</sup>. Patients with breast carcinoma usually present with painless breast lump in 66% of cases, painful breast lump in 11%, nipple changes (Like crustation, retraction and discharge) in 15% and with miscellaneous symptoms (Local oedema, erythema, inflammatory changes ...ect) in 5%. Breast cancer presenting as an abscess is not only rare but is also potentially cheating as it may divert the clinician's attention to this rather common inflammatory process and, consequently, patients are discharged after drainage of their breast abscesses<sup>1,2,3</sup>. The problem becomes more complicated and deceiving in elderly, postmenopausal women as breast abscesses at this age, besides being rare, fail to display the classical clinical features of inflammation while the old age makes one think

of malignancy<sup>4,5</sup>. On the other hand, breast cancer is rare in adolescent girls while suppuration is rather common, especially secondary to infected haematoma, making the diagnosis of breast cancer a remote one<sup>6</sup>. During pregnancy and lactation, breast suppuration and mastitis, which are fairly common at those periods may resemble inflammatory carcinoma; so this aggressive malignant tumour should be kept in mind and every effort should be made to differentiate it from a breast abscess including taking a biopsy for histopathological examination<sup>3</sup>.

### Pateint and Methods

This is a prospective study of 110 patients who presented, clinically, with breast abscess and were treated in Basrah General Hospital during the period from January 1990 to December 1995. All the patients presented with enlarged, tender (part or whole) breasts with inflammatory changes (notably erythema) of the skin of the affected breast. Drainage, under general anaesthesia, was done to all patients and sev

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eral pieces were taken from the abscess wall and floor and were sent for histopathological examination prepared by the conventional method of H&E (Haematoxylin & Eosin). All patients were started on a broad spectrum antibiotic pre-and post-operatively

## Results

Of the 110 patients included in this study 12 (10.9%) had breast carcinoma that was proved with histopathological examination. Seven patients (58.3%) were more than 50 years old (4 patients were more than 60 years old and 3 patients were 50-60 years old). On the other hand, 4 patients (33.3%) were in the reproductive period of life (20-50 years old) as is shown in table I. Scirrhus carcinoma was encountered in 4 patients (33.3%), infiltrating carcinoma in another 4 and inflammatory and medullary carcinoma each in 2 (16.6%) of the remaining patients, as is shown in table II. All patients presented with clear local manifestations of breast abscess, in addition, 84 patients (76.4%) had evident rise in body temperature while 26 (23.6%) were afebrile or had mild fever (temperature < 37.5 C). In the former group, only 3 patients (3.5%) had cancer on histopathological examination while in the latter group the comparative figures were considerably higher with 9 patients (34.6%) proven to have cancer (table III). Only one patient presented with a duration of illness of less than 7 days, 4 with 7-15 days and 7 with more than 15 days (table IV).

## Discussion

Breast cancer usually presents as a lump, whether painful or not, nipple changes, nipple bleeding or even with signs of distant metastasis. Sometimes it can present in an unusual manner like mastitis and suppuration. Such strange presentations potentially pose diagnostic challenge to the clinician and may lead to delay in diagnosing such a life-threatening condition<sup>3</sup>. On the other hand, carcinomatous lesions of the breast might get secondarily infected with abscess formation, something that would further add to the clinician's trouble<sup>3</sup>. Breast carcinoma may resemble some benign breast lesions like fibrocystic disease of the breast especially when the latter is associated with clinical manifestations of acute inflammation<sup>7,8</sup>. Breast abscess in old postmenopausal women, especially early in its course, can be confused with breast cancer due to both the lack of inflammatory criteria and rarity of this condition in this age group<sup>4,5</sup>. And since breast cancer, and other cancers in general, are commoner in those patients (in this study 7 (58.3%) of patients with cancer were more than 50 years old), age is a worthy factor to consider in such patients. Duration of symptom before medical consultation is important, too, as it was found to be relatively long for patients who were proved to have malignancy later on<sup>3</sup>. In this study, 7 (58.3%) patients had breast abscess for more than 2 weeks. Another factor to be considered is the presence or absence of systemic

Age	No. of cases detected
< 20 years	1
20-29 =	0
30-39 =	2
40-49 =	2
50-59 =	3
>/ 60 =	4

Table I: Number of cases proved to have malignancy related to age

Clinical picture	No. (%) of cases	No..(%) of case with positive biopsy
Local signs + systemic fever	84 (76.3)	3 (3.5)
Local signs + MILD / NO fever	26 (23.6)	9 (34.6)

Table III: Positive biopsies (for cancer) in relation to fever.

Type of tumour	No. of cases
inflammatory carcinoma	2
infiltrating duct caecinoma	4
Medullary carcinoma	2
Scirrhouc carcinoma	4

Table II: Type of tumour detected on his-  
topathology.

Duration of symptoms	No. of caese
< 7 days	1
7 - 15 =	4
> 15 =	7

Table IV: Duration of symptoms on  
presentation.

manifestations of an abscess, especially fever. It has been reported that the absence of fever (or presence of mild fever) in a patient with breast abscess should raise the suspicion of an underlying malignancy<sup>1,3</sup> Results of this study support the same finding as 34% of patients presenting with no/mild fever were found to have breast carcinoma on histopathological examination compared to 3.5% of those presenting with full blown picture of breast abscess. During pregnancy and lactation, one should always keep inflammatory carcinoma in mind especially if clinical manifestation of mastitis did not disappear after the usual course of treatment<sup>3</sup>.

### *Conclusion*

This study has provided evidence that breast cancer should be suspected in certain groups of patients presenting with breast abscess. That is why it is recommended that biopsy should be taken from the floor and edge of breast abscesses of elderly post-menopausal women, women presenting with a rather long duration of illness and those presenting with mild/fever.

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