Role of Triple Assessment in Detection of Breast Cancer in Baquba Teaching Hospital

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Abstract

Background: Breast cancer is the most commonly identified dangerous cancer in females. While breast cancer has been recorded to be a source of female mortality in many developing countries, studies have shown that bronchogenic carcinoma exceeds breast cancer as the most common reason of female mortality.

Objective: This study aims at evaluating the role of (clinical examination, radiological finding and histopathological finding) in detection of breast cancer in Baquba Teaching Hospital.

Patients and Methods: This cross-sectional study recruited ambulatory patients at outpatient breast clinic unit in a Baquba Teaching Hospital from 1st of January to 31th of May 2019.

Results: This study showed that while 39 (93%) of breast cancer patients had a positive finding on clinical examination, only 3 (7%) had a negative finding. On the other hand our data showed that 35 (83%) of breast cancer patients had positive radiological findings and only 7 (17 %) of breast cancer patients had negative radiological findings. 42 (100%) of breast cancer patients have shown positive histopathological findings.

Conclusion: Triple assessment is a very useful diagnostic tool to evaluate patients with breast lumps and detect patients with breast cancer.

Keywords: Breast Cancer, Baquba Teaching Hospital

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Introduction

Breast cancer is steadily increasing as the most widespread malignancy among women in the developed and developing regions around the world [1]. Ranking the first among the Iraqi population since three decades and the second killer following cerebrovascular diseases, breast cancer has caused a major public health problem among women [2,3]. Regrettably many Iraqi patients still present at advanced stages at the time of diagnosis [4]. In the absence of specific primary prevention strategies for reducing breast cancer incidence, early detection and prompt treatment remain the major control

options to improve survival and quality of life of the affected patients in low and middle income countries including Iraq [5].

The incidence rates vary considerably, with the highest rates in the developed world and the lowest rates in Africa and Asia , It has been proposed that the reason behind that is the outcome of multiple environmental and hereditary factors [6,7]. The survival rate is one of the best vital procedures of cancer maintenance, and is a respectable implement for comparison among states [8,9]. World Health Organization (WHO) described a main rise in cancer mortality in subsequent years is possibly in the (EMR) [1,10]. Aim of the study To evaluate the role of (Clinical examination, radiological finding and histopathological finding) in detection of breast cancer.

Patients and Methods

This is a cross-sectional study that has recruited ambulatory patients at outpatient breast clinic unit in Baquba Teaching Hospital from 1st of January to 31th of May 2019. This study included 309 patients. A special questionnaire was used to collect data from patients. That questionnaire included the following parameters age, marital state, breast feeding history , contraceptive pill history and family history of breast cancer (appendix) . Each patient was first examined by a specialist surgeon by the inspection of any asymmetry , local swelling , skin changes , nipple changes then by palpation for any lump or swelling (size , position , attachments , consistency , edge , surface and shape) . Axilla was also examined for any lymph node enlargement. All patients were sent to either breast ultrasound or mammography to detect any breast abnormality, According to the radiological finding seen on ultrasounography and mammography some patients were sent to histopathology according to surgeon decision if there is any suspicious of malignancy . Breast cancer patients were classified by surgeons into differnt stages according to the histopathological findings.

Statistical analysis

Data of all patients were entered and analyzed using Microsoft Excel 2010 software for window 7. Descriptive statistics were presented as mean ± standard deviation (SD) for continuous variables and as frequencies and proportions (%) for categorical variables.

Results

There are 309 patients who have enrolled in this study, 42 (14 %) patients were diagnosed with breast cancer and 267 (86 %) were diagnosed with other breast abnormality. Table (1) Distribution of Breast Cancer patients according to their age in the studied group . In our study; the patients were classified into six groups based on their ages. Our data showed that 1 (2%) of breast cancer patients classified to be in the first age group (21-30 years) , 7 (17%) of them to the second group (31-40 years) , 13 (31%) to the third group (41-50 years) , 10 (24%) to the forth group (51-60 years) , 9 (21%) to the fifth group (61-70 years) and 2 (5%) belong to the sixth group (71-80 years).

Table (2) Distribution of breast cancer according to the family history of breast cancer . Regarding family history of breast cancer; while only 3 patients (7%) had a positive family history 39 patients (93%) a negative history.

Table (3) Distribution of breast cancer according to the history of breast feeding. In our study, 29 (69%) of breast cancer patients showed a positive history of breastfeeding and only 13 (31%) of them had a negative history.

Table (4) Distribution of breast cancer according to the history of oral contraceptive pills. While 12 patients (29%) had a history of oral contraceptive pill, 30 patients (71%) did not have.

Table (5) Distribution of breast cancer according to the marital state. In our study, 34 (81%) of breast cancer patients were married, 4 (9.5%) were widow and 4 (9.5%) were single.

Table (6) Distribution of breast cancer according to the cancer stages. Most cases belonged to the differentiation stage II (19/42, 45%), followed by stage III (11/42, 26%), stage I (7/42, 17%) and stage IV (5/42, 12%).

Table (7) Distribution of breast cancer patients according to the finding of triple assessment. In this study; 39 (93%) of breast cancer patients had a positive finding on the clinical examination and only 3 (7%) had a negative finding. While 35 (83%) of breast cancer patients had a positive radiological findings, 7 (17 %) had a negative radiological findings. Finally, 42 (100%) of breast cancer patients had a positive histopathological findings. P value was significant (0.018).

Table (1): Distribution of Breast Cancer patients according to their ages in the studied groups

Variables (years)	No. of breast cancer patients	Percentage of breast cancer patients
21 – 30	1	2 %
31 – 40	7	17 %
41 – 50	13	31 %
51 – 60	10	24 %
61 – 70	9	21 %
71 – 80	2	5 %
Total	42	100 %

Table (2): Distribution of breast cancer according to the family history of breast cancer

Variable	No. of patients	Percentage of patients
Positive family Hx.	3	7 %
Negative family Hx.	39	93 %
Total	42	100%

Table (3): Distribution of breast cancer according to the history of breast feeding

Variable	No. of patients	Percentage of patients
Positive Hx.	29	69 %
Negative Hx.	13	31 %
Total	42	100%

Table (4): Distribution of breast cancer according to the history of oral contraceptive pills

Variable	No. of patients	Percentage of patients
Positive Hx.	12	29 %
Negative Hx.	30	71 %
Total	42	100%

Table (5): Distribution of breast cancer according to the marital state

Variable	No. of patients	Percentage of patients
Married	34	81 %
Widow	4	9.5 %
Single	4	9.5 %
Total	42	100%

Table (6): Distribution of breast cancer according to the cancer stages

Variable	No. of patients	Percentage of patients
Stage 1	7	17 %
Stage 2	19	45 %
Stage 3	11	26 %
Stage 4	5	12 %
Total	42	100%

Table (7): Distribution of breast cancer patients according to the finding of triple assessment

Categories	positive cases		negative cases		Total	P Value
	N	%	N	%		
Clinical finding	39	93%	3	7%	42	0.018
Radiological finding	35	83%	7	17%	42	
Histopathological finding	42	100%	0	0%	42	

Discussion

Having a positive family history of breast cancer is a risk factor for breast cancer. Familial breast cancer counts 20–30% of all breast cancer cases [11, 12] . In our study, only 7% of patients had first- or second-degree family member(s) with breast cancer.

History of lactation was demonstrated in 69% of total patients. This might be attributed to a better awareness of the protective effect of lactation among the women. A previous study [13], showed a frequency of 69.8% (similar to our results) of

breast cancer patients who were lactating during their life. While Al-Anbari study reported lower frequency (48.83%) [14] while Hasoon study recorded that 80% of the breast cancer patients had a history of lactation [15]. Our results showed that; 71% of patients had no history of oral contraceptive pills use and 29% had used those pills. An earlier study from Iraq showed that only 18% of patients had a history of oral contraceptive pill [15]. Another study showed that 20% of Bahrainian patients had a history of oral contraceptive pills consumption [16, 17]. Majority of the patients belonged to stage II (45%), followed by stage III (26%). Such percent was also reported previously from studies that have done in some Arabic regions [18]. However, the trend in Western countries, is reversed: maximum number of cases belong to stage I, followed by stage II, III and IV [19]. The study showed that (93%) of breast cancer patients had a positive finding on clinical examination and (83%) had positive radiological findings which disagrees with the other study in china where (88%) of breast cancer patients had a positive finding on clinical examination and (94%) of patients had positive radiological finding [20] . Another study in south India showed that (95%) of patients had a positive finding on clinical examination and (98%) had a positive radiological finding [21] , Another study in Kashmir mentioned that (93%) of patients had a positive clinical finding and (100%) of patients had positive radiological findings [22].

Conclusions

To conclude, our data showed that the triple assessment is a very useful diagnostic tool to get a good evaluation for the patients with breast lumps and to detect patients with breast cancer as well.

Recommendations

Regular mammography combined with regular clinical examination may offer the best opportunity of increasing the proportion of early stage detection of breast cancer.

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