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Breast Cancer: A Lot to be Done!!

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ABSTRACT. One hundred and twenty-one female patients with breast cancer were treated at King Abdulaziz University Hospital over a period of eight years. Early breast cancer (stage 0-I) represented 13.2%, while 73.3% presented with locally advanced disease (stage II-III), and examined metastatic disease at the time of presentation was only present in 5.8%. The majority of our patients were premenopausal (64.5%) and 30.6% were less than 40 years old. Modified radical mastectomy was performed in 71.1%, while only 15.7% had conservative breast surgery. The present situation of this common and serious health problem is less than ideal and indicates that a lot has to be done to detect the disease at an earlier stage. This can be achieved by the introduction of public health education programs, initiation of breast clinics, and encouraging screening mammogram protocols.

Keywords: Breast Cancer, Females, Saudi Arabia.

Introduction

Breast cancer is the most frequently diagnosed cancer site in Saudi females (18.8%) $[^{1,2]}$ and in American (U.S.A.) females (32%), and is the most frequent cause of cancer death in females in the U.S.A. $(18\%)^{[3]}$. Improved public awareness of this problem has led to a marked increase in the rate of early diagnosis in the U.S.A., which was reflected by an improved outcome of breast cancer patients^[4,5].

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Major changes in the modalities of treatment of breast cancer patients has occurred in the last 20 years with the addition of new protocols of treatment using adjuvant chemotherapy, radiation therapy, and hormonal treatment.

In this report we will review King Abdulaziz University Hospital's (KAUH) experience with breast cancer patients over an eight year period and compare the results with the available data from other centers in the Kingdom and abroad.

Materials and Methods

This is a retrospective analysis of female patients with breast cancer treated at KAUH between 1988 and 1996. Demographic data was collected from patients' files, outpatient visit notes, and histopathological reports. Staging was performed according to the recommendation of the American Joint Committee on Cancer $(AJCC)^{[6]}$ and this was going to be compared with data of staging reported from the American Cancer Society in 1994 and 1996^[3,7]. Our results regarding age of presentation will be compared by those reported from the U.S.A. to reveal any age differences between both countries. The type of surgery performed on our patients will be determined and compared with what has been reported from the American Cancer Society and the King Faisal Specialist Hospital (KFSH) in Riyadh, Saudi Arabia^[7,16].

Results

During this study period a total of 121 female patients with breast cancer were treated at KAUH. Of those, 52 patients (43%) were Saudi, 44 patients (36.3%) were other Arab nationalities, and the remaining 25 patients (20.7%) were non-Arab nationalities. More than two-thirds of the patients (85.1%) were less than 60 years old, 64.5% were younger than 50 years of age, and 30.6% were less than 40 (Fig. 1). Family history of breast cancer was present in 21 patients (17.4%), and 89 patients (73.6%) were married, nine patient (7.4%) were never married, while the remaining 23 patients (19%) were either divorced or widowed. Seven patients (5.8%) were pregnant at the time of their first presentation. Breast lumps were the presenting symptom in 113 patients (93.4%), other symptoms and signs included mastalgia in 20 patients (16.5%) and skin changes in 33 patients (27.3%) which included skin ulceration, nipple discharge, nodules, and peau d'orange. The right breast was affected more frequently than the left breast (57% versus 43%, respectively). The most common site affected was the upper outer quadrant in 43.8% and the least affected part was the central part in 4.1%. However, in 9.9% of the patients, the site of the tumor was not specified in their files.

Early breast cancer (stage I) was diagnosed in 16 patients (13.2%) only, 89 patients (73.3%) presented with locally advanced disease (stage II-III) (Fig. 2). Metastatic disease was present in seven patients (5.8%), and in nine patients (7.5%) the stage of the tumor was not specified. The types of surgery performed included modified radical mastectomy in 86 patients (71.1%), breast conservative surgery in 19 patients



(15.7%), and other types of surgery in 16 patients (13.2%).

Fig. 1. Percentage of breast cancer in different ages in the U.S.A. and KAUH.

Figure 3 demonstrates that 15.7% of the patients examined had conservative breast surgery compared with 31.3% in the U.S.A. Data reported from KFSH were also plotted for comparison. The number of lymph nodes dissected and the rate of their involvement with malignancy was not documented in some of the files and some of the histopathological reports. Estrogen receptors determination were performed in 21 patients (17.5%) only. Of those, 14 patients (66.6%) had positive results. Hormonal treatment was used in 73 patients (60.3%) and adjuvant chemotherapy in 61.2%.

Discussion

Breast cancer is a major health problem for females all over the world. It accounts for 32% of cancer diagnosed in women in the U.S.A.^[5] and it constitutes 18.8% of malignancies diagnosed in females in Saudi Arabia^[1].

The younger age of patients at first presentation in the present series is comparable to what has been reported from KFSH, but quite different from that of the U.S.A. In the present study, 30.6% of patients were less than 40 years old compared to only 7.1% of those reported from the U.S.A. in the national data base of 1994^[4]. Although 10% of their patients were 80 years or older, none of the present study patients presented at this

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Fig. 2. Stage at time of presentation in the U.S.A. and KAUH.



Fig. 3. Comparison of different types of surgery performed for breast cancer patients in KAUH, KFSH, and the U.S.A.

age. The younger age of patients in this study may be due to diseases affecting younger women or a reflection of a younger aged society. From 1970 to 1990, the number of women in the U.S.A. who were 20-30 years old increased substantially, leading to a subsequent increase in the actual number of breast cancers diagnosed at these ages. If the specific breast cancer incidence rate applied to women of these ages in the population for the years 1970, 1980, and 1990, the results are 5,120 breast cancer cases diagnosed in 1970, 7,800 diagnosed in 1980, and 10,880 in 1990, respectively. This increase in the number could give the impression of an epidemic if the underlying increase in the population was not considered^[7]. There are other factors which could explain the age difference between different countries which include the difference in the age of menarche, weight at menopause, and varying oestrogen levels^[8-10].

The present data demonstrated clearly that patients at KAUH, unfortunately, came late for treatment. Only 13.2% of them presented in the early stages compared to 58% in the U.S.A. The majority (73.5%) presented with locally advanced disease (stages II-III) compared to 30% in the U.S.A.^[4]. The late presentation of patients could be reflecting lack of health education, difficulty in access to specialized medical centres, and the lack of screening programs.

Although the mortality from breast cancer has been relatively stable since 1950, it declined between 1989 and 1992 by 4.7%. This decline has been attributed mainly to improvements in breast cancer treatment, increase in breast cancer awareness and screening, and changes in the prevalence of the risk factors^[6,10,11]. Mortality rates are expected to continue to decline if more cases are diagnosed at an earlier stage. Recent meta-analysis from the U.S.A. showed a reduction in mortality by 10-24% and an increase in long-term survival^[12]. Conservative breast surgery was performed in only 15.7% of the patients of the present study as compared with 31.3% in the U.S.A. which could well reflect the effect of the late presentation of the patients.

In summary, the present data shows the lack of adequate staging of patients, hormone-receptors studies, and proper documentation of the status of the axillary lymph nodes. Although almost two-thirds of the patients presented with locally advanced disease, none had neo-adjuvant chemotherapy which could downstage the disease, allowing more conservative breast operations and possibly a better outcome. A multidisciplinary approach for this major health problem is the best solution to avoid unnecessary delay in the diagnosis and proper treatment. This should include public health education to increase the awareness of the society about this common killing disease, to initiate screening mammography programs, and to support breast clinics supervised by a team of all concerned specialities^[13,14,15,16]. Proper utilization of the available resources, accurate documentation of data, and proper follow-up would be of great help in the planning and management of such a serious health problem. So we all should agree that there is a lot to be done!!

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سرطان الثدي: مازال أمامنا الكثير !!!

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المستخلص. لقد تم خضوع مائة وواحد وعشرون سيدة ممن يعانون من سرطان الثدي للعلاج بمستشفى الملك عبد العزيز الجامعي، خلال ثمان سنوات. لقد كانت ٢. ١٣٪ من الحالات تعاني من سرطان الثدي المبكر ــ(المرحلة صفر-۱)، بينما ٣. ٧٣٪ من الحالات كانت تعانى من مراحل متقدمة من المرض متوضيعيناً (المرحلة ٢-٢)، كتما كانت ٨. ٥٪ من الحالات تعاني من مراحل المرض المتحولة عند تقديم البحث. لقد كانت غَالبسية المرضى (٥, ٦٤٪) ممن لم يبلغوا سن الياس، و٦, ٣٠٪ لم يتعدوا سن الأربعين. وقد تم استخدام الاستشميال الإشعامي المطور في ١ , ٧١٪ من الحالات، بينماً تم إخضاع فقط ٧، ١٠٪ من الحالات لجراحة اللدى التحفظية. إنَّ الوضع الحالي لهذه المشكلة المسحينة الجادة، والشبائعة الانتسسار هو أقل من مستسالي، مما يؤكد أنه مسازال هناك الكشيس لإنجبازه في منجبال أكتششناف المرض في متراحله المبكرة. يمكن توفير ذلك بتقييم برامج المنحلة العامة، وإنشاء عيادات الثدي التخصصية، وتشجيع إجراءات أشعة فحص الثدي.