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RESEARCH ARTICLE/ARAŞTIRMA YAZISI

COMPLAINT AND DIAGNOSTIC PROFILES OF BREAST DISEASE PATIENTS

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ABSTRACT

Introduction: One of the most important reasons for clinical visits made by women regarding their breast health is the fear of breast cancer. In our study, our aim was to find the association between complaints that led to patient visits to the Gulhane Military Medical School, Breast Disease Polyclinic clinic and diagnosis after arrival.

Material and Method: Our study followed 1003 patients who made clinical visits to the Breast Polyclinic between January 22, 2004 and March 28, 2006.

Results: The mean age of patients enrolled in our study was 42.84±11.90 (12–76). According to their menstrual cycle, 73.7% of patients were premenauposal while 26.3% of patients were postmenopausal. According to the diagnoses, 45% of patients were diagnosed with fibrocystic dysplasia, 8.9% with fibroadenoma, 1% with axillary lymphadenopathy, 2.7% with mastitis 2.2% with ductal ectasia, 0.4% with accessory breast, 3.3% with breast cancer, and 36.6% of the patients had findings that were normal.

Conclusion: 85% of patients who were enrolled in our study visited the clinic due to discomfort and breast lumps. With greater awareness about breast cancer, the number of patients who visit the clinic for routine check-ups can easily increase leading to early diagnosis and treatment.

Key words: breast, cancer, complaint, early diagnosis

MEME HASTALIKLARI POLİKLİNİĞİNE MÜRACAAT EDEN HASTALARIN YAKINMA VE TANI PROFİLİÖZET

Amaç: Polikliniklere memeyle ilgili yapılan başvuruların en önemli nedeni meme kanserine yakalanmış olma korkusudur.. Bu çalışma Gülhane Askeri Tıp Akademisi Meme Polikliniğine başvuran hastaların belirli değişkenlere göre dağılımının analizi amacı ile yapılmıştır.

Hastalar ve Yöntem: Çalışmamız meme polikliniğine 22.01.2004 – 28.03.2006 tarihleri arasında başvuran 1003 hastada yapılmıştır.

Bulgular: Hastaların ortalama yaşları 42.84±11.90 (12–76) idi. Adet durumlarına göre hastaların % 73.7'si (n=739) premenapozal, % 26.3'ü (n=264) postmenapozal idi. Tanılara göre kadınların % 45'inde fibrokistik değişiklik, % 8.9'unda fibroadenom, % 1'inde aksiller lenfadenopati, % 2.7'sinde mastit/apse, % 2.2 sinde duktal ektazi, % 0.4'ünde aksesuar meme, % 3.3'ünde meme kanseri saptandı, % 36.6 sında ise bulgular normaldi.

Sonuç: Polikliniklere başvuru yakınmalarının %85'ini ağrı ve memede kitle oluşturmaktadır. Toplumun meme kanseri konusunda bilgilenmesi sağlanarak, bayanların rutin kontrollere başvurması sonucu erken tanı ve tedavi başarısı oranı artacaktır.

Anahtar sözcükler: meme, kanser, yakınma, erken tanI

Introduction and Purpose

Breast-related complaints have an important place in the primary care clinical services. A large part of examinations that are done are due to the concern of being breast cancer (1). Breast cancer, in the world, is the most common type of cancer in women (2). Breast cancer constitutes 32% of common cancers and 19% of cancer-related deaths in women. Breast cancer occurs in one of eight women in USA and Canada, and one of ten women in European Countries (3). In our country, breast cancer constitutes 24.1% of all cancers (4,5,6). Although incidence and prognosis vary according to geographic regions, it is reported that breast cancer incidence increases about 1.5% annually (6,7). Therefore, a careful physical examination and required diagnostic methods should be done for any breast complaints or check-up. Breast cancer detected at an early stage will both reduce mortality and increase quality of life by reducing disability rates (8,26).

In comparison to the frequent number of breast-related complaints recorded in women, there are only a small number of breast clinics found within various public and private hospitals in our country. Breast disease is a health problem that requires a multi-disciplinary approach (1,9). In various studies, it has drawn attention to important relationship between early diagnosis and treatment with

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success and prognosis. It has been shown that the breast cancer rate is lower in women who are non-smokers, breast-feeding, and are not overweight (10). But there is no proven effective primary prevention method to combat breast cancer in women at the communal level (11). Therefore, as a basic strategy in reducing mortality rates, secondary conservation measures by early diagnosis are emerging (1). As secondary prevention methods, there are three methods suggested for diagnosing inchoated carcinogenesis processes before clinical evidence appears and have vast application fields. These are: Teaching women how to do a monthly breast examination by themselves using community-related programs, performing intermittent breast examinations by a physician or a nurse, and intermittent breast exam by mammography (11,12). As long as patients are reasurred that the majority of complaints related to the breast are either benign or no pathological evidence of malignancy, it will be possible to dispel concerns of women with cancer that was caught earlier. Prognosis and therapy's chances of success will increase with the malignancies diagnosed. At this step, there are important duties for the physicians in charge at the primary care level. Physicians in charge of the primary care clinic centers must have knowledge about the underlying causes of breast complaints and must refer the patients that may have malignant tumors to a breast specialist quickly and efficiently (1).

Nowadays, the most common approach that applied are screening programs. Breast cancer screening has resulted in detection and treatment of breast cancer at an earlier stage. In many studies in literature related to screening, it is seen that localized disease is mainly (approximately 87.8%) T1 tumor, and approximately 15% is T2 in women detected tumor. Breast conserving surgery + radiotherapy could be applied to patients with a malignancy diagnosed by screening (13). Therefore, we must make patients conscious of the importance of intermittent breast checks without any abnormalities in their breast (14).

Complaints of patients visiting the breast clinic are mostly breast pain, palpable breast mass, and breast nipple discharge. When evaluating this type of patient, the risk factors related to breast cancer must be questioned in the history. Patient's age, family history, use of hormone replacement therapy, and oral contraceptive use history must be questioned (15).

In our study, our aim is to analyze the distribution of patients who visited the breast clinic for various complaints or just for a check-up, according to specific variables and to question the diagnosis in accordance with the complaints.

Material and Method

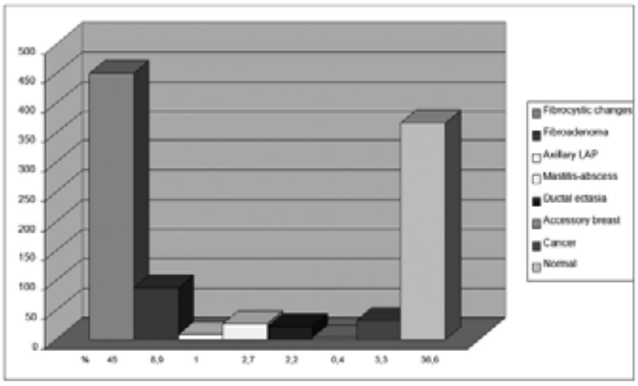
1003 patients who visited the Breast Clinic between January 22, 2004 and March 28, 2006 are included in the study. Patients' ages, familial breast cancer history, menstrual situation, oral contraceptive use, hormone replacement use, complaints that they conveyed diagnosis by physical examination and laboratory research are all recorded. The data obtained from this descriptive study were transferred to the SSPS package program. Average ± Standard deviation, % are used for the descriptive statistical methods while study data was being evaluated. Comparison of qualitative data however, a chi-square test was used. P values of less than 0.05 were considered statistically significant.

Table 1. Distribution of patients referred to Breast clinic according to a variety of characteristics

	n	%
Age Groups		
Under 20	24	2.4
20-35 years	251	25
36-45 years	349	34.8
46-60 years	343	34.2
Upper 60	36	3.6
Family History		
Present	30	3
Absent	973	97
Menstruel Situation		
Premenopausal	739	73.7
Postmenopausal	264	26.3
OCP Usage		
No taking	989	98,6
1-4 years	10	1
5 years and more	4	0,4
HRT Usage		
No taking	980	97,7
1-4 years	16	1,6
5 years and more	7	0,7
Complaint		
Pain	707	70,5
Mass	140	14
None	113	11,3
Breast Nipple Discharge	29	2,9
Redness	10	1
Lesion	4	0,4
Diagnosis		
Fibrocystic Changes	451	45
Fibroadenoma	89	8,9
Axillary LAP	10	1
Mastitis-Abscess	27	2,7
Ductal Ectasia	22	2,2
Accessory breast	4	0,4
Cancer	33	3,3
Normal	367	36,6

Findings

The patients were women aged from 12-76 (ave. 42.84+-11.90) years. According to age groups; 2.4% of patients (n=24) were un-



Graphic 1. Patient Profile According To Diagnoses

der 20 years of age, 2.5% of (n=25) were between 20-35 years old, 34.8% of (n=349) were between 36-45 years old, 34.2% of (n=343) were between 46-65 years old, and 3.6% of (n=36) were 65 years or older. When the family histories of patients with breast cancer were analyzed 97% of them (n=973) didn't have any familial breast cancer history and 53 of them (n=30) had familial breast cancer history. According to menstrual situation, 73.7% of (n=739) patients applicant were premenauposal and 26.3% of (n=264) were postmenopausal. When oral contraceptive use was analyzed it was determined that 98.6% of patients (n=989) did not use oral contraceptives; 1% of them (n=10) used 1-4 years, and 0.4% of them (n=4) used oral contraceptive 5 or more years (Table 1).

Among the causes on the application of the patients who were admitted to our clinic were: pain in 70.5% (n=707), breast mass in 14% (n=140), breast nipple discharge in 2.9% (n=29), redness in 1% (n=10), and lesion in 0.4% of them (n=4). 113 people (11.3%) were applied for control and did not have any complaints (Table 1).

After all of these diagnosis's were analyzed; 45% of women (n=451) had fibrocystic changes, 8.9% (n=89) had a fibroadenoma, 1% (n=10) had axillary lymphadenopathy, 2.7% (n=27) had mastitis and/or an abscess, 2.2% (n=2) had ductal ectasia, 0.4% (n=4) accessory breast, 3.3% (n=33) breast cancer was detected, and in 36.6% of patients (n=367), findings were evaluated as normal (Graphic 1).

The results obtained after comparing complaints and diagnoses are displayed in Table 2. When viewed in relation to age groups, we observed that patients between the ages of 26 and 45 had the most complaints and a great number of these were related to fibrocystic changes (56.7%). In our study, breast cancer was seen more frequently in patients between the ages of 46 and 65. After the age of 65, breast-related complaints in patients decrease. (Table 3).

Discussion

Under 20 years of age, a woman has 0.05 % breast cancer risk, however, this rate increases to 1.49% at 40 years age, and increases to 3.45% at 60 years age (16,17). Turkey has a young population, 47.3% of women are between 0-19 years and 45.6% are between 20-54 years old (5,18). Due to the rate of young women is higher

Table 2. Complaints and Diagnostic Profile

Diagnoses		*Complaints*						
		pain	*mass*	*discharge*	*redness*	*lesion*	*none*	*Total*
fibrocystic changes	n	402	32	3	-	-	14	451
	%	56.9	22.9	10.3	-	-	12.4	45
Fibroadenoma	n	25	60	-	-	-	4	89
	%	3.5	42.9	-	-	-	3.5	8.9
Axillary LAP	n	2	7	-	-	-	1	10
	%	0.3	5	-	-	-	0.9	1
Mastitis -abscess	n	12	4	1	9	1	-	27
	%	1.7	2.9	3.4	90	25	-	2.7
Ductal ectasia	n	5	2	15	-	-	-	22
	%	0.7	1.4	51.7	-	-	-	2.2
Accessory breast	n	1	3	-	-	-	-	4
	%	0.1	2.1	-	-	-	-	0.4
cancer	n	5	19	1	-	2	6	33
	%	0.7	13.6	3.4	-	50	5.3	3.3
normal	n	255	13	9	1	1	88	367
	%	36.1	9.3	31	1	25	77.9	36.6
Total	n	707	140	29	10	4	113	1003
	%				100			

Table 3. Diagnose profile according to age groups

Diagnosis	Age Groups					Total
	20 age under	20-35 age	36-45 age	46-65 age	65 age upper	
fibrocystic changes	7	133	198	112	1	451
Fibroadenoma	10	26	35	17	1	89
Axillary LAP	-	2	1	7	-	10
Mastitis-abscess	-	7	8	11	1	27
Ductal ectasia	-	9	6	7	-	22
Accessory breast	-	3	1	-	-	4
Cancer	-	1	3	24	5	33
Normal	7	70	97	165	28	367
Total	24	251	349	343	36	1003

than the elderly; the majority of Turkish women are in the low risk group in terms of age. However, it should not be forgotten that the average life expectancy will increase, which is now 65 for the average Turkish woman, and age is a risk factor for breast cancer (18). Furthermore, present day Turkey is among the countries that have moderate breast cancer rates in women (11). In a study done by the American College of Surgeons, 12,315 patients were included in the study and breast cancer was diagnosed in 73% of patients by self-examination, 23% of patients by a physician's examination, and 4% by mammography (5).

According to the patients who came to the clinic with breast related complaints, pain was the most frequent reason for their visit. (1,9). When asked, women under the age of 55 who went to the hospital for any reason, 75% of them declared periodic breast pain mild or serious. The rate is 50% of the patients who visited the Breast Clinic (1). Similarly, in our study, pain is the number one reason to visit the clinic. 707 patients (70.5%) came with a complaint of pain to our clinic. After physical examination and radiological tests, no disease was found in the breast tissue in 255 (36.1%) patients. In patients who came to the clinic with a complaint of breast pain, the incidence of breast cancer diagnosis is very low, which is contrary to expectation. This rate is given in the literature is 0.5% (1) and in our study this rate is 0.7%. The type of pain, severity, and age of the patient must be considered for the correct approach to breast pain. It has been shown that if physical examination is normal in patients who are under the age of 35 and pain is described as moderate and cyclic, instead of applying to imaging methods, treatment can be provided by giving information to the patients about the reasons related to their breast pain. However, if the patient's age is 35 or over, mammography and if necessary, a breast ultrasound should be included after physical examination no matter how severe the pain is or the type of pain (1,9,16). The patient should be informed if there are no abnormalities. If a patient complaining of breast pain during their clinical visit is not diagnosed with a disease, it is often quite beneficial to the patient if they are given information about their situation. (13,17). Furthermore, this is an indication that psychological factors play a role in the etiology of breast pain (18). However, no matter what the patient's age is, it is important to keep in mind that if an abnormality is encountered during physical examination, it should be followed by the application of imaging techniques that areappropriate to the patient's age (16).

It is important to direct appropriate disciplines for treatment of non-breast related pains. Mastalgia is divided into two as cyclic and non-cyclic. In studies, it has been found that 65% of mastalgia are cyclic, namely, it is associated with the menstrual period. It is thought that this situation is caused by hormonal effects of premenstrual period and physiological changes in the breast (1). Non-cyclic mastalgia is mostly unilateral (3) and caused by reasons usually associated with chest wall like angina pectoris, pleurisy, pericarditis pneumonia, costrocondritis, etc (1,9).

Another common complaint is a palpable breast mass. The masses detected at breast are usually benign characteristics. Fibrocystic disease constitutes the diagnosis in the vast majority of patients with masses (19,20). In our study, 140 patients visited the clinic with a complaint of palpable breast masses and fibroadenoma was determined in 60 (42.9%). The most often benign neoplasm's of breast are already fibroadenomas (21). Malignancy is determined in 10% of palpable masses. In our study, the malignancy rate was 3.6% in patients who came to the clinic with a palpable mass complaint.

We think the reason of why our rate is lower than the literature is that our study group is relatively more conscious and sensitive about their health and getting to hospital facilities is easier.

Breast nipple discharges are another parameter which applies to the breast clinic and constitutes 10% part of applications (9). Breast nipple discharge rate in our study is compatible with the literature. Breast nipple discharge is usually physiologic and in our study, nine (31%) of the patients who came in with this complaint were not

Table 4. Complaint Profile According To Age Groups

Complaint according toage groups		Complaints						Total
		pain	mass	none	discharge	redness	lesion	
Age Groups	20 age under	16	8	-	-	-	-	24
	20-35 age	193	35	6	14	1	2	251
	36-45 age	269	44	25	7	3	1	349
	46-65 age	215	52	63	7	6	-	343
	65 age upper	14	1	19	1	-	1	36
Total		707	140	113	29	10	4	1003

diagnosed with a breast-related disease. Pathological discharges, a fortiori, are unilateral and take root from only one ductal system, with an 8-15% possibility there could be an underlying malignancy (22). In our study, one person (3.4%) had malignancy. Our rate is lower according to the literature due to our patient group's characteristics. It should be noted that malignant neoplasm's could be very little, non-calcified, and intraductal in the early stages and may not be detected on mammography. Therefore, the patients who visited the clinic with such complaints should be evaluated carefully (9). Mastitis is seen much more in women who are breastfeeding. In our study, mastitis was diagnosed in one person (3.4%). Staphylococcus aureus was been detected at smear. Often, reasons of mastitis are fissures at the nipple and the most common agent is staph. aureus. In mastitis, it increases with temperature, pain, and redness. Poor nipple circulation, wrong breastfeeding techniques, and deficient breastfeeding can precipitate mastitis (10).

Ductal ectasias are seen rarely and we see more at 50-60 years age. In these patients, the areola of the breast and its surrounding area could be red and painful (13). In our study, it was determined that ductal ectasia was in 0.7% of the patients who complained of pain, 1.4% of applicants with a breast mass, and 51.7% of applicants with breast nipple discharge.

Of the patients who came to our clinic complaining of a breast nipple lesion, two were diagnosed with breast cancer (50%). Patients with these types of complaints should be carefully examined during their visit to the clinic. (Table 2).

Age is an important risk factor for breast cancer. In the United States, 95% of breast cancer emerges after 40 years old (24). Therefore, if there is no family history, mammography screening is suggested to women over 40 years of age (25,26). According to our findings, 72.7% of patients with a breast cancer diagnosis were between 46-65 years age. Breast cancer in patients of over 46 years consists of 87.8% of all breast cancers. These results point out to us that complaints of women 46 years and over related to the breast should be evaluated more carefully (Table 3).

According to our findings, breast lesions and breast masses are the most frequent complaints when breast cancer is diagnosed (Table 2).

Results: Patients who have breast-related complaints and visit their primary health center should be evaluated properly. Becoming conscious about health is increasing in our country. Studies about breast cancer might make women more conscious than other health problems. But this awareness also brings along hypersensitivity. It is widely known that women who have breast-related complaints encounter excessive anxiety. We think that our study will help health personnel who work at primary health centers, with breast-related complaints and the reason behind these complaints.

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