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Evaluation of Coexistent Pathology in Patients with Breast Cancer Who Underwent Modified Radical Mastectomy (MRM) in Rasool-e- Akram Hospital between Years 2008-2014

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Abstract

Introduction: Breast cancer is one of the most important and frequent cancer in women which increase in developing countries. It becomes major cause of death in women between ages 20-59 years. The most prevalent malignant tumor is Invasive Ductal Carcinoma (IDC). Pathology reports play an important role in diagnosis, prognosis and treatment of patients. So, we decided to evaluate the prevalence of coexistent pathology in patients with breast cancer who underwent MRM surgery.

Methods and Materials: We study all patients who underwent MRM surgery between years 2008-2014 in Rasool-e-Akram hospital. We evaluate electronic documents and pathology reports of patients and analyze all variants in spss v.18 software.

Results: We have 72 cases which 2 of them are men and the rest are women. The mean age is 50.56 year. (Min=27 yrs, max= 86 yrs). The main pathologies are IDC, DCIS, ILC, LCIS, Tubulolobular Carcinoma and the most prevalent one is IDC. In 61.1% of patients, coexistent pathology is reported and the most prevalent one is Fibrocystic changes (84.1%). The other coexistence pathologies are: Ductal Hypeplasia (31.8%), Adenosis (20.5%), Intraductal Papilloma (6.8%), Fibroadenomatoid changes (6.8%), Stromal Fibrosis (4.5%), Columar changes (2.3%), Apocrine Metaplasia (2.3%), Hypersecretory hyperplasia (2.3%), Lobular Hyperplasia (2.3%), Adenomyoepitheliomatosis (2.3%). There is no significant correlation between main pathology and presence of coexistent pathology. (Sig =0.47).

Conclusion: Overlay, the most prevalent main pathology is IDC and Coexistent pathology is fibrocystic changes. There is no significant relation between main pathology and coexistent pathology.

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Introduction

Breast cancer is the most common malignant cancer and also important factor of mortality rate between the women all over the world that contains 9/22% of women's cancer [1-3]. Recently the prevalence of the breast cancer is rising in the developing countries such as Iran [4]. According to the report stated from Iran International cancer department 6976 person had breast. cancer in 2007 (Iv) the common malignant tumor of the breast are :Ductal carcinoma in situ (DCIS) Lobular carcinoma *in situ*, Invasive ductal carcinoma coloid carcinoma and tubular invasive carcinoma medullary coloid carcinoma and tubular carcinoma and according to this kind of tumors the way of treatment is so different such as Radical microscopy, radiotherapy hormone therapy and etc. [5]. It's important to consider that final decision for stages of treatment and disease is according to pathologic recording [6,7] the type of mass and pathology is important so that in researches the present of lobular neoplasia with invaver beast tumor play an important roie in pre awareness and increases the risk of tumor recurrent of the breast [8-10] also the present of prolifrative toll in invasive breast cancer is not rare and happens until 23% [11] for this reasons and according to high prevalence of infecting breast cancer and its mortality rate and its important of pathologic findings getting tolls in pre awareness we are going to study the type of pathologic tolls with malignant breast tumors in patient under treating with radical mastoscopy between the year 1386-1393 in Rasool Akram hospital in this article [12-17].

Method and Material

In this study we administered a list of people who were under the mild radical mastoscopy between the year 2008-2014 in Rasool Akram hospital. Then the needed variable was reduced from their electronic files. This getting information was analysed with spss software. We used ANOVA, correlation and chi square for absorebency analysis and some index such as mean, mode and average for descriptive analysis.

Result

The variable items are main toll pathology, favorable pathology, gender, location of mass, old and blood contention. Study the relation between gender and age and mass location showed that from 72 patient 2 people were men with invasive ductal carcinoma in left breast aged 83 and 84 with no favourable pathology. The average of olds were 50 56. 56% of patient have left breast cancer and 50% of them have right breast cancer the main toll pathology were invasive and in situ ductal carcinoma invasive and in situ lobular carcinoma recorded carcinoma. The most common with 87.3% and in totally 95.7% of patient had ductal carcinoma (both invasive and in situ) and 7% of patient had lobular carcinoma (both invasive and situ). 5.6% was situ ductal carcinoma, 35.2% invasive ductal carcinoma and 50.7% both in situ and invasive ductal carcinoma and 4.2% ductal carcinoma with lobular carcinoma the study between favourable pathology and main toll pathology showed 41.1% of patient (44case) had favourable pathology and 38.9% did not have favourable pathology is fibrocystic changes (84.1%) of patient with favourable pathology and other favourable pathology in order prera lance are ductal hyperplasia (31.8%) adeno sis (20.5%). Interdductal papilloma (6.8%) fiboradenomatoid stromal fibrosis (4.5%) komular changes (2.3%). Apocrine changes (2.3%) hyper secretory hyperplasia (2.3%) adeno epithelium atosis (2.3%) between the main toll pathology and favourable pathology dose not find any relationship. Between fibrocystic (36 cases) and the kind of main toll pathology we do not find any important relationship (sig=0.47).

In our study 80.6 % (58 cases) of patient had not vascular complication and 19.4 % of them have it according to their files. In the analytic studies which we do between the present of fibrocystic changes (36 case) and the type of main pathology of mass there was not any significant relationship (sig=0.87). Also there is not significant relationship between ductal hyperplasia and (13 case) with the main type of pathology (sig=0.48).

There was not any significant relationship between main pathology of mass of patient with vascular complication or non-complication in the study of 14 cases which had vascular complication (sig=0.94). Also there was not any significant relationship between the present of vascular complication and present of other accompanied pathology (sig=0.37). From 37 cases which had fibrocystic changes we showed 5 cases with vascular complication an there was not any significant relationship between the present of relationship and fibrocystic changes (sig=0.30). There was not any relationship between the age of patient and the type of main pathology (sig=0.60). The age average among patient who have vascular complication was 53.5 and it was 49.8 among 58 cases who did not have vascular complication which there was not any significant analytical finding (sig=0/33). Also there was not any relationship between the mass location and age average of patient. The age average of patient who have right breast masses was 48.7 and it was 52.3 in patient who have left breast masses (sig=0.22). From 72 patient 44 cases had other pathology than main pathology that their age average was 48.4 and we did not find any significant finding between the age of patient and the present of pathology (sig=0.07).

Discussion

Breast cancer is the most common malignant cancer and cause of mortality because of cancer among women which conform 9.22% of women's cancer and it was the reason of 7.13% of mortality of women in 2008 [18-25]. Breast cancer is the most common reason of death of women all over the world [26-30]. Breast cancer is the rarest cancer in men and conform 0.2% of men's cancer [31,32]. According to studies, the outbreak of breast cancers is increasing among women with 50-64 year old and this matter is happy for screening at this age. This cancer is the main cause of death among women with 20-59 year old [33-35]. In our study the age average of patient was 50-56. In the clinical study of patient the final decision for curing patient and the stage of illness is according to their pathologic files [36,37]. These files are the most important files in the study of illness so that we also use these files for achieving main variables. As we see in the recent searches that the most common pathology among Iranian patient infected with breast cancer is invasive ductal carcinoma, (79%-89%) [38,39].

In our study we finded that the most common pathology was invasive ductal carcinoma (87.3%) and in totally 95.7% of patient had ductal carcinoma both in situ and invasive. Also in another studies the most common histologic breast cancer in the sample of breast cancer was invasive ductal carcinoma [40-43]. In our study 7% of patient had lobular masses which according to studies it can be one of the most important factor in pre awareness of mass recurrences in the same breast [43-49]. In the other hand in one study at 2009 in Sweden the present of both LCIS and DCIS was recommended as one of the factor for mass recurrences which this matter was showed in 4.2% of our cases [50-55]. In the study of attendant pathology 6.1% of patient have one attendant pathology at least which their most common was fibrocystic changes (84.1%) which is most common benign tolls among women according to recent studies which exist in 60-90% of normal biopsies and it is estimated that 10% of women (at least) are infecting with cystic illness with clinical signs all over their life [56,57]. Considering that this study is cross sectional we cannot opine about the discipline of these tolls and also we cannot consider these tolls as a pre awareness or a risk factor but according to analytical study which we do there was not any significant finding between the type of main pathology and fibrocystic changes (sig=0.87). Second attendant pathology according to amplitude was ductal hyper plasia (31.8%) which can be a risk factor for tumor recurrencses in the same breast or aliem breast [58-60]. But in another researches showed that there is not any significant relationship between the present of ductal carcinoma in the same breast [61]. And we did not do anything for finding relationship between these tolls, also we did not find any relationship between main pathology and ductal hyperplasia (13 cases) in our analytical studies (sig=0.48). Other attendant pathologies according to outbreak are: adenosis (20.5%) inters ductal papilloma (6.8%) fibroadenomatoid changes (6.8%), stromal fibros (5.4%), komular changes (2.3%), apocrine metaplasia (2.3%), hyper scrotory hyperplasia (2.3%), lobular hyperplasia (2.3%), and adenoepitheliomatosis (2.3%). In one of the case report in 2013 in Tuness we can see second grade infected ductal carcinoma and lobular mastit in 77-year old women which this camaraderie was not in any of our patient. In another case-report in 2014 we

can see fibroadenomatoid changes and inter ductal carcinoma at the same time also we can see fibroadenomatoid changes with main pathology in 3 cases (6.8%). According to recent studies the present of proliforativ tolls in invasive and non invasive breast cancers was rare and it is happening until 23% and we see attendant pathology in 61.1% of our patient.

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