

Frequency of Various Types of Breast Lumps in Females among Malaysian Population.

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Abstract:

Aim:

To determine the frequency of various types of breast lump in females among Malaysian population.

Objective:

The patients are examined for breast lump like fibroadenoma, fibrocystic disease, phyllodes tumor abscess, fat necrosis, atypical hyperplasia and etc.

Method:

Female patients above 14 years of age presenting for the first time with a breast lump is included in the study. Although majority of breast lumps are benign, diagnosis of benign from malignant lesions is important as breast cancer is the worst fear of a female presenting with a lump in the breast. A proper diagnosis should be taken to ensure that it is just a lump and not a cancerous cell. There are different types of breast lumps and it varies in size.

Background:

Breast lumps are the common reason of majority females to visit clinics. Breast lumps could be benign or malignant. Although majority of breast lumps are benign, diagnosis of benign from malignant lesions is important as breast cancer is the worst fear of a female presenting with a lump in the breast. A proper diagnosis should be taken to ensure it is just a lump and not a cancerous cell. There are different types of breast lumps and it varies in size. Awareness should be created regarding detection of early breast cancer and to foster knowledge about the medical and socio economic implications of a common public health issue. As Malaysia is a developing country, frequency of various types of breast lumps in females above 14 years old are studied.

Reason:

Awareness should be created regarding detection of early breast cancer and to foster knowledge about the medical and social economic implications of a common public health issue. As Malaysia is a developing country, frequency of various types of breast lumps in females above 14 years old are studied.

Keywords: Breast, lump, cancer, tumor, female.

INTRODUCTION:

Breast cancer is a well-known type of cancer in the women both in the developed as well as in developing countries. The incidence of breast cancer is increasing in the developing country due to increase life expectancy, increase urbanization and adoption of western lifestyle. Globally breast cancer is one of the most common cancers and is a major public health challenge to women health. World Health Organization stated that there were 14.1 million new cancer cases, 8.2 million cancer deaths and 32.6 million people living with cancer within 5 years of diagnosis in 2012 worldwide.⁽¹⁾

In Asia, there has been rapid increase in the incidence of breast cancer in recent years, and the disease may occur at relatively young age (Moore et al., 2003). In Malaysia, there were 37400 people with newly diagnosed with cancer, an age-standardized incident rate (ASR) of 14.3 per 100000 people is given, 15% of the total population are at risk of getting cancer before the age of 75 and 21700 people dying from cancer every year. The incidence of breast cancer is highest among Chinese population (66.1 per 100000) followed by Indians (47 per 100000) and Malays (27.7 per 100000).⁽²⁾

Majority of females visit the clinic with the common presentation of breast lump.⁽³⁾ Breast lumps are localized swellings, protuberance, bulge or bump in the breast that feels different from the breast tissue in the same area of the

other breast. A breast lump can be either benign or malignant. Although majority of breast lumps are benign, diagnosis of benign from malignant lesions is important as breast cancer is the worst fear of a female presenting with a lump. Globally, awareness is created about the significant mortality of breast lumps especially about breast cancer. The most common breast lumps are fibroadenoma, fibrocystic disease, abscess, phyllodes tumor and fat necrosis or malignant breast lump.

MATERIALS AND METHODS:

A total of 50 patients from Sentul Medical Centre (SMC) were examined and included in this study during the period of January 2014 until December 2014. SMC is private medical centre which is located in the Sentul district of Kuala Lumpur which is capital of Malaysia. It has approximately 30 beds mainly for obstetrics and gynecology which also includes day care beds. All female patients with complaints of breast lump over 14 years of age presenting for the first time were included in the study.

RESULTS:

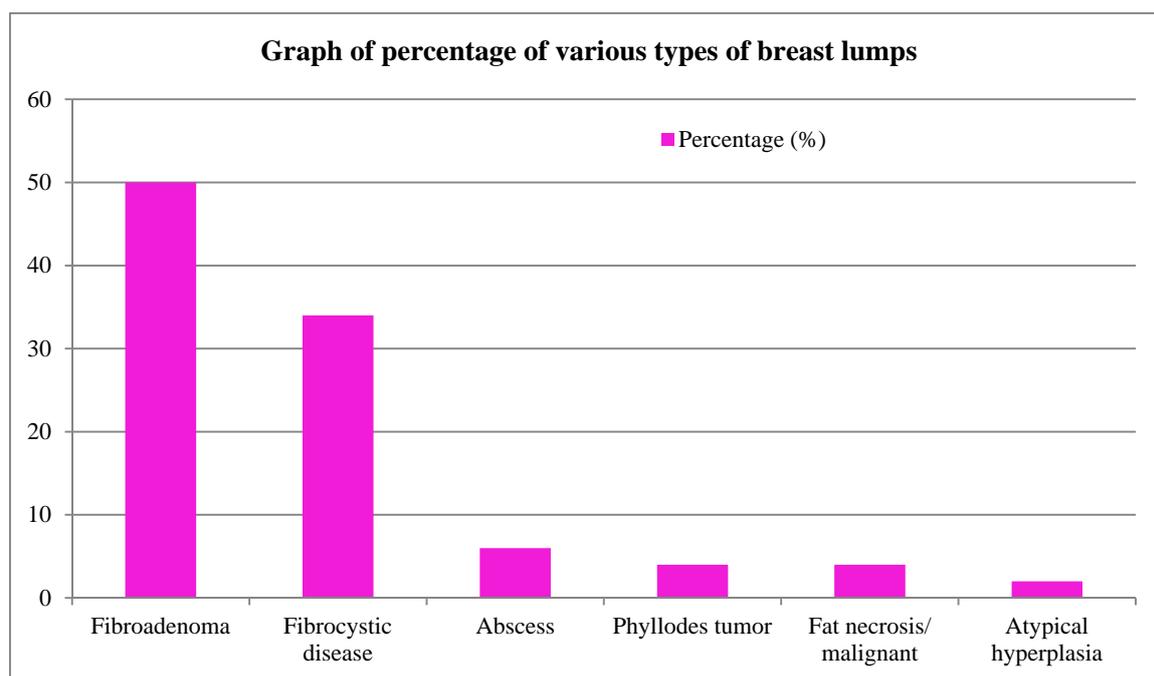
A total of 50 patients were included in the study according to sample size. The mean age of presentation was 49.7 years old. Most of the patients had undergone biopsy on the side of the breast with the percentage of 62.0%, whereas the right side of the breast was 19.0%.

Table 1: Table of various types of breast lumps, the number of patients with its percentages.

Types of breast lump	Number of patients	Percentage (%)
Fibro adenoma	25	50
Fibrocystic disease	17	34
Abscess	3	6
Phyllodes tumor	2	4
Fat necrosis/ malignant	2	4
Atypical hyperplasia	1	2

Table 1 shows the type of breast lump and the number of patients having the lumps with its percentage. The most common lesion was fibro adenoma breast which was present in 25 patients (50%) and 17 patients (34%) reported to have fibrocystic disease. 3 patients (6%) had abscess and 2 patients (4%) had phyllodes tumor. 2 patients (4%) were reported to have fat necrosis or malignant lesion i.e. carcinoma breast. Only 1 patient (2%) were examined and found to have atypical hyperplasia.

The graph below shows the percentage of various types of breast lumps in female patients who had undergone biopsy procedure.



DISCUSSION :

Although benign breast lumps are most common than malignant ones, females who present to the private medical centre with complaints of breast lump suffer anxiety due to the fear of it turning out to be a malignant lesion. Thus it is important to investigate these patients according to standard protocols to relieve their stress.⁽⁴⁾ Most breast lumps aren't breast cancer, there is always a chance that a lump may be breast cancer, even in younger women.

50 female patients has been included in this study. The mean age of the patients was 49.7 years old. Left side of the breast was involved in the majority of patients i.e. 31 patients (62.0%) versus 10 patients (19.0%) in which right side of the breast was involved. This finding was also noted by Isaac U and colleagues.⁽⁵⁾ Zainab Mashal Khan et al also noted in their study that lump in the breast was more common on the left side with 57.5% of their patients than on the right side i.e. 42.5%⁽⁶⁾

Biopsy was performed to all the patients reporting with breast lump. As shown in table 1, study is found to be fibroadenoma which was present in 25 patients (50%). Fibroadenoma is one of the most common lesion among

young woman. It is a breast lump where tissues and ducts around a milk producing lobe grow and thickens over it. Fibroadenomas are benign tumors made up of both glandular breast tissue and stromal (connective) tissue.⁽¹¹⁾ In Karachi, Pakistan Talpur and colleagues also reported that fibroadenoma was the most common benign breast lump among their patients i.e. 30.66%⁽⁷⁾. Internationally, Jamal A reported that fibroadenoma was the most common breast lesion in their population in Jeddah, Saudi Arabia where it was present in 47% of the females.⁽⁸⁾ Fibroadenoma is not common breast lesion everywhere because in Nepal, it was the least common lesion, present in 21.6% of the female patients.⁽⁹⁾ The use of birth control pills before age 20 is linked to the risk of fibroadenomas. Women with fibroadenomas have an increased risk of breast cancer which is about 11/2 to 2 times the risk of women with no breast changes.⁽¹¹⁾

Fibrocystic disease is a condition in where it occurs due to thickening of tissue or cyst and it is mostly benign. In this study, fibrocystic disease is the second commonest lesion to fibroadenoma with 17 patients (34%). Whereas Khalid et al reported fibrocystic disease to be more common in their

study⁽¹⁰⁾ These differences might be due to geographical, socioeconomic, cultural and religious variation. The third common lesion is abscess which is a collection of pus and infected tissue which appear in a form of lump. Only 3 patients (6%) had abscess.

Phyllodes tumor are rare breast tumor which contains two types of breast tissue: stromal tissue and glandular tissue. Phyllodes tumor are usually not cancer but in rare cases they may cause cancer. Although as many as third of these tumor are classified as malignant based on how they look under microscope, less than 5% of phyllodes tumors overall are clearly true cancers based on spread to other areas, such as the lungs.⁽¹¹⁾

In this study the rate breast cancer was found to be 4 % (2 out of 50 patients) among patient presenting with palpable breast lump. However Al-Rikabi and Husain,2012 and Ahmed et al 2010 had a higher rate of breast cancer (33.3% ,34%) in their studies among Saudi and Sudanese patients respectively.^(12,13) Whereas in Yemeni the rate of breast cancer was 26.9%. This difference may be explained by increasing breast cancer awareness and cancer screening centers that help in early breast cancer detection.⁽¹⁴⁾

CONCLUSION:

Although benign breast lesions are more common among female population than malignant lesion, the frequency of breast cancer is increasing rapidly across the global. It is important to screen females at a younger age to detect early breast cancer. Internationally mass awareness should be created regarding detection of early breast cancer and to foster knowledge about the medical and socio economic implications of a common public health issue.

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