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A STUDY ON THE BENIGN BREAST DISEASES AT ALLIED HOSPITAL FAISALABAD

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Abstract:

Purpose*: Women having benign breast diseases (BBD) are under extreme threat of breeding breast cancer. This study aimed to investigate the BBD's spectrum to recognize the domination of benign neoplasms, inflammatory lesions and associated age-wise assessment.*

Methodology*: This research was conducted at the pathology department of Allied hospital Faisalabad. Data collected of 368 BBD patients in the duration of three years from 2014 to 2017.*

Results: *There were 2 patients of intra-ductal papilloma (IDP), 3 of accessory breast with Fibrocystic (FC) changes, 4 of fibrosis (F), 5 of phyllo ides tumor (PL), 7 of lipoma, 12 of granulomatous mastitis (GM), 64 of breast abscess (BA), 81 patients of fibrocystic disease (FCD) and 190 of fibroadenoma (FA). Association amongst the ages and rate of recurrence of various kind of abrasions also assessed for understanding the relationship between biasing aspects and the lesion's type.*

Conclusions*: As a result of this study it has been revealing that FA is very common kind of breast abrasion and is frequent amongst ladies with age ranging 10 to 20 years. At the second place is FCD, whereas both of these are* unusual in females above the age of 40. In Faisalabad, the more common type is neoplasms.

Keywords: *Abrasions, Lobular Falsification, Epithelial, Fibrocystic Changes, Hyperplasia, Stromal Proliferation.*

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INTRODUCTION:

Benign breast lesion (BBL) is one of the main predictors (out of 3) for detection of the threat of breast cancer alongside improved breast denseness and genetics by mammography. BBL can be classified as per the cytological description, nature and prognosis of the lesion as well as nipple aberrations and nipple's unusual expulsion [1]. Currently, the most appropriate categorized premalignant lesions include abnormal lobular hyperplasia, abnormal ductal hyperplasia and lobular in situ. [2, 3].

BBD progresses breast cancers in about 30% of women later on in life and benign abrasions are those having exceptional fibrocystic alterations, alongside augmented fibrous tissue or cyst creation suffer from benign shapes of ductal or lobular falsification and benign cellular alterations similar to as discovered in usual or unusual lobular or ductal hyperplasia [17]. Benign cancers are clearly distinguished; structural origin of tissue may be usual. The growth rate is generally slow and developing; might get towards to degeneration or revert; mitotic shapes are exceptional and usual. Around normal tissues, local assault is generally well-isolated masses and unified which don't subvert [22].

Prevalence/endurance values and presentation pattern differ throughout the universe [21]. About 68% of women show non-proliferative, 29% show pro-liferative excluding atypia diseases whereas 3% display a proliferative disease beside atypia. Fifty-five women have found with incident breast cancer [5, 6]. In Pakistan, low ensures value, boost level disease report and extreme incidence has discovered [21].

BBD outlines most of the breast pathologies competed for dignity from growing anomalies, provocative abrasions, epithelial and stromal proliferation to numerous neoplasms. They may exhibit a number of signs or could be detected as supplementary microscopic verdicts [12]. As per the numerous BBD's studies, these lesions subsequently resulted in the risks of breast cancer. There is 3 broad pathological classifications of these lesions i.e. proliferative, proliferative with atypia and non-proliferative [7, 9, 25]. BBL detection and perception in the oriental area, correct cure and administration would be further clarified to pathologists and clinicians after this study.

MATERIALS AND METHODS:

In a medical institution at Pathology department, this study was designed comprising of BBL data of preceding 3 years. All age groups 368 women having BBL were included in this study. We investigated the more prominent kind of abrasions. The latest version of SPSS software was used for data analyses. Interrelation among the patient's ages and different kind of abrasions studied as well. Rates and ratios clarified for qualitative fluctuations.

RESULTS:

The patient's age ranges from 12-70 years. In this study, we observe the intra-ductal papilloma (IDP), accessory breast with FC changes, fibrosis (F), phyllo ides tumour (PL), lipoma, granulomatous mastitis (GM), breast abscess (BA), fibrocystic disease (FCD) and fibroadenoma (FA). There were 51.6% patients (190) of FA, 81 patients (22%) of FCD, 17.3% (64) BA Patients, 12 patients (3.26%) of GM, 7 patients (1.90%) with lipoma, PL in 5 patients (1.35%), fibrosis in 1.08% (4) patients, accessory breast with FC changes in 3 patients (0.81%) and 2 patients (0.54%) with IDP. In these outcomes, FA becomes the very common BBL then FCD finds to be the second common finding and BA is the third, while on the other side, the minimum discoveries are IDP, fibrosis and PL.

Out of 190 patients of fibroadenoma, 31.79% (117) patients fall in the age ranging from 10 to 20, 15.21% (56) patients in the range of 21 to 30, 2.98% (11) patient's ages were 31-40 and 1.35% (5) patient's age ranging from 41-50 years. FA is discovered to be widespread (31.79%) in teenagers and very limited (1.35%) aged females. FCD's 81 patients include 3.26% (12) patients of age ranges from 10 to 20, 8.42% (31) patients in the age range of 21 to 30, 6.25% (23) patient's ages were from 31 to 40, 3.26% (12) patients were ranging from 41 to 50 and 0.81% (3) patient's ages ranging 51 to 60 years. FCD cases were common in females of 21 to 30 years and rare in females from 51 to 60 years. There were 64 cases of breast abscess in this study. Ages of 4.07% (15) patients were ranges from 10 to 20, 7.88% (29) patients from 21 to 30, 3.53% (13) patients from 31 to 40, 0.81% (3) patients from 41 to 50 and 0.54% (2) patients from 51 to 70 years. According to this study, BA is more common (7.9%) in the females of age from 21 to 30 years and least common in females of ages above 50 years. Out of 12 GM's, the age ranges of 0.81% (3) patients were from 15 to 25, 1.63% (6) patients from 26 to 35 and 0.81% (2) patients from 36 to 45. The GM is more common in the women of ages ranging from 26 to 35 years. In this study, lipoma recorded in seven patients. It is common in patients of ages from 36 to 45 as 1.35% (5) patients fall in the range from 36 to 45 and 0.54% (2) patients from 25 to 35. Fibrosis was diagnosed in 4 patients.

0.81% (3) patient's ages were range from 21 to 30 and 0.27% (1) patient age range from 10 to 20 years. Patients with PL were 5 in the current study out of which 0.81% (3) patient's ages range from 15 to 25 and 0.54% (2) ranges from 46 to 55. With the ages of 22, 50 and 30 years, only 3 females found with accessory breast and FC changes. Only 2 patients of ages 48 and 23 years were having IDP. Amongst 368 patients, total 9 variants of BBL were discovered in this study.

On the basis of diagnosis, cytological details and nature, lesions are categorized as inflammations of breast, benign neoplasm and tumor-like conditions. Most of the patients {55.43% (204)} were discover benign neoplasm, tumor-like conditions found in 88 (23.91%) patients and Inflammations of breast found in 20.65% (76) patients.

Table – I: Benign Breast Lesions Frequency

Histological Diagnosis	Number	Percentage
Intraductal papilloma	2	0.540
Accessory breast with FC changes	3	0.810
Fibrosis	4	1.080
Phyllodes tumour	5	1.350
Lipoma	7	1.900
Granulomatous mastitis	12	3.260
Breast abscess	64	17.300
Fibrocystic disease	81	22.000
Fibroadenoma	190	51.600

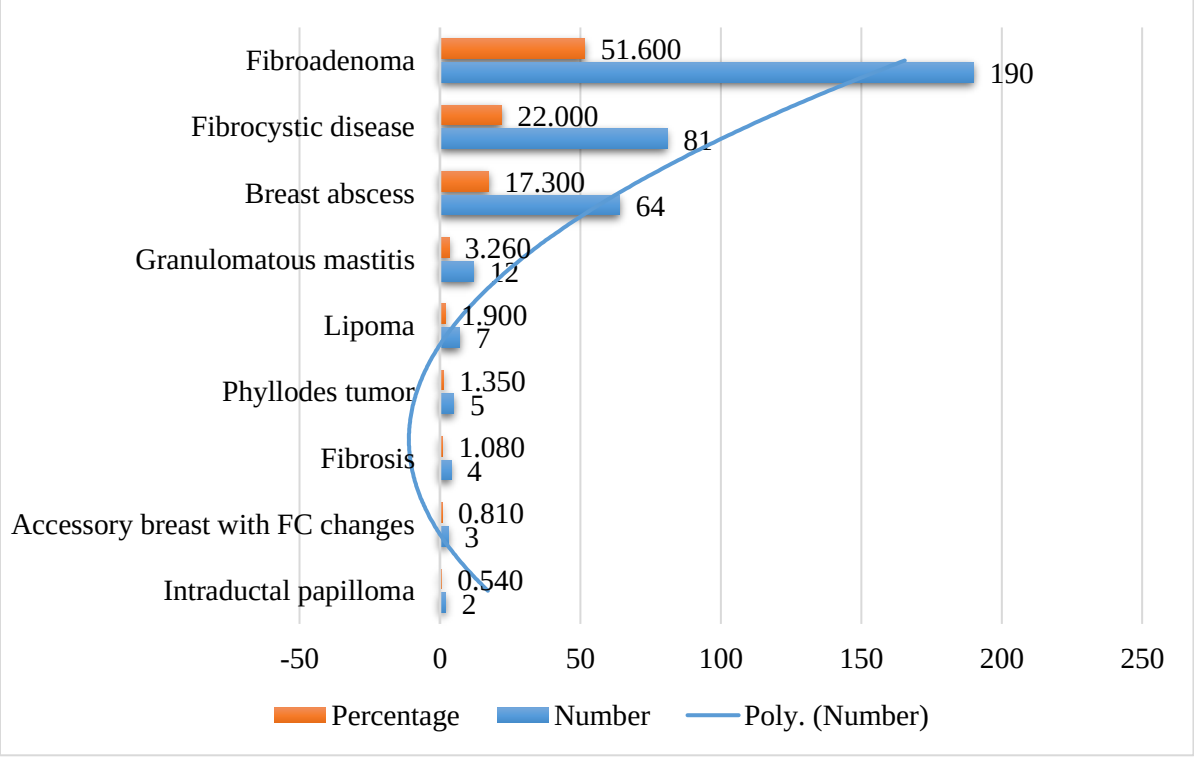
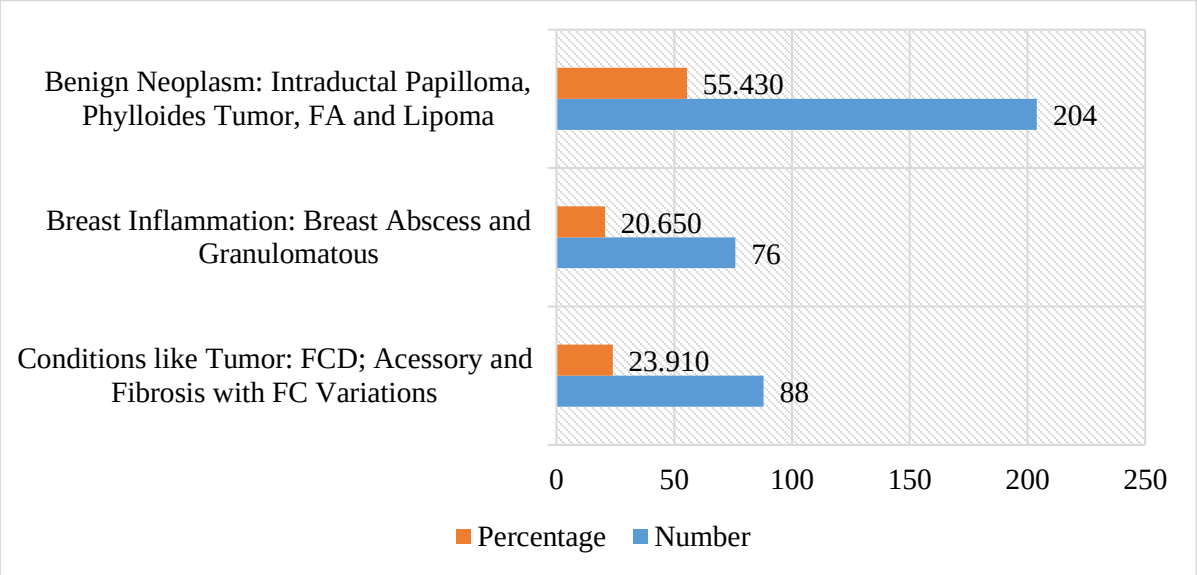


Table – II: Nature and Prevalence of Lesions

Classifications and Lesions	Number	Percentage
Conditions like Tumor: FCD; Accessory and Fibrosis with FC Variations	88	23.910
Breast Inflammation: Breast Abscess and Granulomatous	76	20.650
Benign Neoplasm: Intraductal Papilloma, Phyllodes Tumor, FA and Lipoma	204	55.430



DISCUSSION:

Amongst the Asian countries, Pakistan has the maximum breast cancer incidences by having 69.1 % cases out of 100,000 females [4]. Diagnosis in the later stage is frequent reason death due to cancer [20]. The main obstacles include poor diagnostic facilities, lack of awareness and education, unhygienic practices and poverty. Other foremost causes of deferral incorrect findings of breast cancer cases are spiritual treatments, firm trusts in traditional treatment and treatment by quacks [20]. BBL has a possibility of breeding into breast cancer, in this regard, by having large scale surveying and their sequel will be the very obliging proactive approach.
BBD encompasses a huge diversity of histologic articles that embrace glandular structures, connective tissue and transformation. These lesions may flourish and very occasionally under hormonal regulation. Because of not being a life-threatening condition, it is hard to guess the frequency of BBD in the wider populace.

After breast cancer, FA is the second most common solid tumour. In our study, FA (51.6%) was discovered to be the most frequent. The same type of results was found in a study of South Africa, Nigeria [10, 11], Sudan [14], Pakistan [15, 19], India [23] and Nepal [24]. In Pakistan, in one more study, the FA's calculation was 57% presenting that it is very common, FCD was 21%, BA 16%, mammary duct ectasia 12%, Mastalgia 11%, duct papilloma 4.7% and GM was 4% [19].

In Pakistan, in one more study, it was discovered that the most (66.3%) of BBD comprised of fibrocystic change [18]. With the growing age, FCC's incidence increases [19]. As per the Dupont and Page findings, 31.8% of BBD accounts by FCC [8]. As per this research, the second highly frequent breast lesion in Pakistani women is fibrocystic change and the same results were found in various studies [2, 19]. In the Khazanda and McFarlane's study, the share of duct papilloma (2.8%) was not momentous. Current study exhibited unalike consequences from a said study in the view that in Pakistan the ratio is 4.7% in 3 years [19], whereas 6.7% was in Jamaica within 2 years' timeframe. The fibrosis outcomes were also not as considered as associated to more studies. As a result of some studies, the incidence of the main fibrosis varies from 3.6% to 8.2% of lesions [13].

Substantial association discovered in types of BBD lesions and ages. In the current study, the age of BBD patients varied between 12-70 years as similar to a Nigerian study in which the age ranged from 14-63 years [11, 16]. Whereas, in one latest study from Nigeria, presented that one-third female having FA are below 20 years and two third are under 25 [10] with a comparison to our study, in which 61 % FA's patients were under 20 years.

In one study, women with BBL identified with early stage and lower grade cancers in later life and were affirmative with hormone receptor parameter. It is therefore suggested to sensibly observe and sequel after BBL finding to circumvent upcoming impediments of breast cancer. The easiest forecaster for breast cancer risk is BBL which permits a timely management [7].

CONCLUSION:

The current study logically determined that in women of Pakistan, fibroadenoma is the most recurrent benign type of lesion. It is very common among teenager females. The second most recurring lesion is FCD, however, both FA and FCD are not common in the women above 40 years ago. Investigation of BBL instances should be made eventually to assess the development into malignant form. It will be helpful in considering the prospects and in preclusion of breast cancer by diagnostics approach and consistent follow-up.

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