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A cross sectional study on the patterns of occurrence of breast problems in a private Hospital in Chennai

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Introduction:
Breast problems have existed since antiquity. Edwin smith papyrus dating back to 1600 B.C. describes eight cases of tumors or ulcers of the breast that were treated by a tool called the "fire drill" the writings say about the disease, 'there is no treatment'. The scenario is a lot different now with the advent of modern medicine and so identifying breast problems at an early stage can help reduce a lot of morbidity and mortality [1].Although the existence of benign lumps and other non malignant disease processes of the breast have long been recognized, attempts to classify these conditions and estimate their frequency have suffered from a lack of standardized clinical criteria and terminology[2].

Breast disorders may be non-cancerous (benign) or cancerous (malignant). Most are non-cancerous and not life threatening, often they do not require treatment and simple reassurance would suffice, but women go through a lot of psychological stress on their account. The term "benign breast disorders "encompasses a heterogeneous group of lesions that may present with a wide range of symptoms or may be detected as incidental microscopic findings. The incidence of benign breast lesions begin to rise during the second decade of life peaks in the fourth and fifth decades, as opposed to malignant lesions for which the incidence continues to increase after menopause, although at a less rapid pace [3].

A study was taken up with the main idea of studying the patterns of occurrence of breast problems in a breast clinic and also to study the seasonal variations in the occurrence of breast problems.

Materials and methods:
Study design: the study was done as a hospital based cross – sectional study
Study area: breast clinic of A.C.S .Medical College, Velappanchavadi, Chennai
Inclusion criteria: all women visiting the breast OPD for the first time were included in the study

Study Period: The study was done in the years 2013 and 2014. Data collection was started on January first of 2013 and ended on December 31st of 2014.
Ethical considerations: The women who visited the breast clinic were informed of the study and informed consent was obtained from them for using the data
Sampling Method: Universal sampling was used, all the new cases who attended the breast clinic during the study period were included in the study.

Classification of Main study Variables
1)Fibro adenoma: A benign tumour of the breast, treated by total excision and confirmed by histopathological examination[4,5,6]. The patients are regularly followed up.
2)Fibro adenosis : Lump not palpable by the flat of the fingers but between the plup of fingers and thumb. Indefinite, slightly tender, granular or knotty rubbery[4,5,6].FNAC and confirmation by incisionbiopsy done
3) Isolated Mastalgia: Mostly functional; However pathological lesion is ruled out by four quadrant FNAC and mammography. Treated byconselling and adequate breast support. They are advised to regularly attend breast clinic so as to not to give any chance for missing organic lesion[4,5,6].
4)Mastitis: Inflammatory lesion confirmed by investigations and treated accordingly[4,5,6].
5)Breast abscess: Mostly lactacting mother. Localized collection of pus in the breast. Incision and Drainage done under general anaesthesia and Appropriate Antibiotics given with pus culture and sensitive report. Regular dressing done[4,5,6].
6)Cancer breast: Proper evaluation and staging of the tumour done. Mammogram, CT scan and FNAC confirmation done and Planned surgical treatment carried out[4,5,6].

Seasons : Seasons were classified as
Summer: February – May (4 months)
Monsoon: June – October (4 months)
Winter: November – January (4 months)

Data entry and analysis:
Data entry was done in Microsoft excel and percentages and proportions were calculated wherever possible

Results :
A hospital based cross – sectional study was taken up at the breast clinic in A.C.S. Medical College in the years 2013 and 2014 and the following observations were made.

Patterns of occurrence of breast problems in 2013:
Fibroadenomaandfibroadenosis were the commonest problems with a prevalence of 24.3% each followed by isolated mastalgia which amounted to 19.5% of the overall cases. Details can be seen in table 1

Table 1: Patterns of occurrence of breast problems in 2014

Breast Condition	Number	Percentage
Fibroadenoma	122	24.3
Fibroadenosis	122	24.3
Breast Cancer	18	3.6
Isolated Mastalgia	98	19.5
Mastitis	88	17.5
Breast Abscess	54	10.8
Total	502	100

Patterns of occurrence of breast problems in 2014:
Fibroadenoma and fibroadenosis were the commonest problems with a prevalence of 25.4% and 24.1% respectively followed by isolated mastalgia which amounted to 18.6% of the overall cases. Details can be seen in table 2

Table 2: Patterns of occurrence of breast problems in 2014

Breast Condition	Number	Percentage
Fibroadenoma	133	25.4
Fibroadenosis	126	24.1
Breast Cancer	17	3.3
Isolated Mastalgia	97	18.6
Mastitis	98	18.7
Breast Abscess	52	9.9
Total	523	100

Table 3: Seasonal trends in occurrence of breast problems

There was a marginal difference in the occurrence of breast problems with regards to season. It was seen that breast problems were most seen in the summer season followed by winter and least in the monsoon season, details can be seen in table 3. Maximum number of cases were seen in the month of June, details can be seen in figure 1.

Table 3 : Seasonal trends in the occurrence of breast problems

Seasons	Fibroadenoma	Fibroadenosis	Breast Cancer	Isolated Mastalgia	Mastitis	Breast Abscess	Total (% of the overall total)
Summer	85	82	14	66	66	33	346 (33.76)
Monsoon	89	83	9	60	58	39	338 (32.98)
Winter	81	83	12	69	62	34	341 (33.36)
Total	255	248	35	195	186	106	1025 (100)

Figure 1: Month wise distribution of the breast clinic cases in 2013 and 2014

Discussion:

The current study showed that fibroadenoma (24.3%&25.4%in 2013 and 2014 respectively) was the commonest problem for which women visit a breast clinic followed by fibroadenosis (24.3%&24.1% in 2013 and 2014 respectively) and isolated mastalgia (24.3%&25.4% in 2013 and 2014 respectively) . This was contradictory to the results of a population based study done in Chennai [7] which showed that fibroadenosis was the commonest problem (47.5%), followed by Mastalgia (38%) and fibroadenoma(8.5%) this difference in the prevalence patterns could be because of the fact that the current study was a hospital based study and only women with a substantial problem like a fibroadenoma which presents as a palpable discrete lump are more likely to visit. The current study only showed marginal differnces in the occurrence of breast problems with regards to season and this was in accordance with the results of a study done by Kirkham N et al [8] and published in 1985

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