



## Clinico Pathological Study and Management of Benign Breast Disease

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### Abstract

**Aim:** *The aim of the study is to analyze the incidence, mode of presentation of Benign Breast Disease, Clinical & pathological correlation of benign breast disease, and to Study & compare various modes of management.*

**Materials and Methods:** *The study of benign breast lumps includes random selection of a total of 50 cases. Besides the routine investigations Fine Needle Aspiration Cytology (FNAC) was done in almost all the cases. The follow up of the prospective cases were re-examined at the hospitals. 20 patients returned to the hospital for follow-up. The follow-up included recording of the patients' symptoms and clinical findings related to recurrent breast lumps. At the end of the study period and follow-up the material was analysed and the results were tabulated. The test of significance used in the statistical analysis was the proportion test.*

**Conclusion:** *The findings of this clinico-pathological study of benign breast lumps collaborates with the findings of earlier works in most aspects, but differs with respect to the management of fibroadenomas in teenagers.*

**Keywords:** *Benign Breast Disease, Fine Needle Aspiration Cytology (FNAC), breast lumps, and fibroadenomas.*

### Introduction

Benign breast disease is a common disorder. It is commoner than breast malignancy (Marsel, 1992), accounting to majority of patients presenting with breast symptoms. The ratio of benign disease to malignancy being 10:1 (Barclay et al, 1991).<sup>1</sup>

The disease encompasses wide spectrum of clinico-pathological changes from near normality to severe disease. Up to 33% of women suffer from benign breast disease at some or other time in their lives.<sup>2</sup>

The term fibrocystic disease or other misnomers are absolute now with new concept of ANDI; i.e. these diseases are considered as aberrations in normal development and involution process of breast. Thus, the fibroadenoma is an over growth of fibrous stromain early reproductive or developmental age and a breast cyst represents a failure to undergo involution smoothly.<sup>3-5</sup>

This entity remained neglected until now because of confusing terminology, wide spectrum of

pathological changes, more subjective symptoms compared to clinical findings.<sup>6</sup>

Benign breast disease is an important area both because of its incidence in the population at large and because of the concern it generates. This combination accounts for many referrals to a specialist breast clinic, some of which are inappropriate.<sup>7</sup>

The main problem from the patient's point of view is the intense anxiety associated with any symptom related to the breast, due to fear of cancer. Anxiety aside, serious cosmetic problems may result from repeated small biopsies or removal of breast quadrants in an attempt to search for small mammographic abnormalities. A minority of patients presenting with mastalgia, in spite of being reassured that cancer is not present, will, nevertheless continue to suffer from severe cyclical pain, which is a problem in its own right.<sup>8</sup> With recent studies indicating risk of malignant changes in benign breast disease and awareness of carcinoma breast among patients, need for differentiation of benign breast disease from malignancy have attracted increasing interest in benign breast disease.<sup>9</sup>

### Materials and Methods

The study of benign breast lumps includes random selection of a total of 50 cases during the period

### Observation and Analysis of Results

This study includes a total of 50 cases were studied prospectively over a period of two years.

**Table – I** Age Incidence

Diagnosis	Age Groups (in years)				
	11-20	21-30	31-40	41-50	51-60
Fibroadenoma	10	9	7	1	0
Fibroadenosis	0	10	0	0	0
Cystosarcoma	0	0	2	0	0
Galactocele	0	2	0	0	0
Inflammatory	0	1	0	2	0
Gynaecomastia	2	0	0	0	0
Others	0	1	1	1	1
<b>Total</b>	<b>12(24%)</b>	<b>23(46%)</b>	<b>10(20%)</b>	<b>4(8%)</b>	<b>1(2%)</b>

Among the entire 50 cases there were only two male patients admitted for gynaecomastia. All others were women. On the whole, over 7% of the benign breast lumps presented is the second and

March 1999 to February 2001. Only those patients who presented with breast symptoms to Department of Surgery in Bowring & Lady Curzon Hospital formed part of the study.<sup>10</sup>

The details of age, sex, nature and duration of symptoms, menstrual and obstetric history and the clinical finding (Number, Site and size of the lumps, associated lymphadenopathy etc.) were recorded in a proforma. Enquiry was also made regarding use of oral contraceptives and previous surgery for a breast lump. Besides the routine investigations Fine Needle Aspiration Cytology (FNAC) was done in almost all the cases. The details of surgery and FNAC were available in all the cases.

The follow up of the prospective cases were re-examined at the hospitals. 20 patients returned to the hospital for follow-up. The period of follow-up ranged from 3 to 18 months (mean 8 months) depending on the time of entry, into the study. The follow-up included recording of the patients' symptoms and clinical findings related to recurrent breast lumps. At the end of the study period and follow-up the material was analysed and the results were tabulated. The test of significance used in the statistical analysis was the proportion test.<sup>11-14</sup>

third decades of life. The number of lesions in the third decade (46 %) of the total was significantly higher than the other age groups. There was only 1 patient (2%) whose age was more than fifty. The

youngest patient was a boy aged 13 years with gynaecomastia and the oldest patient in the study was a female patient who presented with lump in the lower outer quadrant was later diagnosed as sclerosingadenosis on histopathological examination of the excised lump at the age of 58 years. The majority of the fibroadenoma (70%) present in the age group of 11to 50 years. However, almost 100% of the patients with fibroadenosis presented a decade later between 20 and 40 years of age. Regarding the solitary cystosarcoma phyllodes it presented in the third and fourth decade of life. Gynaecomastia was common in adolescence. Mean age group for benign breast disease in this study was 26 years.

**Table – II** Distribution of cases

S. No	Lesion	No. of cases	Percentage (%)
1	Fibroadenoma	27	54
2	Fibroadenosis	10	20
3	Cystosarcoma phylloides	2	4
4	Galactocele	2	4
5	Smple cyst	2	4
6	Non lactating breast abscess	2	4
7	Gynaecomastia	2	4
8	Antibioma	1	2
9	Sclerosing adenosis	1	2
10	Duct hyperplasis	1	2

The majority of the Lesions in this study were fibroadenoma accounting for 54% of the 50 cases. Fibrocystic disease, most often termed as fibroadenosis in this study, was the second largest group forming (20%) of the cases. There were 2 cases of cystosarcoma phylloides. Less common conditions include 2 cases of galactocele, 2 cases of chronic mastitis, 2 cases of simple cyst, 2 cases of duct ectasia and one case of antibioma, sclerosingadenosis & ductal hyperplasia each. No cases of tuberculosis, Mondor’s disease, Fat necrosis, Schwannoma or Actinomycosis was included in this study.

**Etiology**

History of use of oral contraceptive pills could be obtained only from 10 cases. Only 10 patients had used oral contraceptive pills in the past and none

of the patients in the study were on pills at the time of presentation.

**Clinical Features**

**Table III (A)** Mode of Presentation

Symptom	No. of cases	Percentage
Lump	40	80%
Mastalgia	12	24%
Nodularity	8	16%
Discharge	4	8%

A lump in the breast was the predominant symptom (80%). Only 9 patients (18%) did not notice any lump, but complained of nodularity and had fibroadenosis (Table – III A). pain, the next common symptom was present in (24%) of the patients. Almost 80% of the patients with fibroadenosis complained of pain whereas only 29% of the patient with fibroadenoma had pain. Relationship of pain to menstruation was noted in 28% of painful fibroadenomata and 31% of painful fibroadenosis. 20 (40%) of the patients presented with symptoms of less than one year duration. 9 (18%) had symptoms for less than a month, whereas 21 (42%) had symptoms for more than one year.

**Table III (B)** Duration of Symptoms

Lesion	Duration of Symptoms			
	<1	1-6	7-12	>12
Fibroadenoma	7	11	0	9
Fibroadenosis	0	1	0	9
Cystosarcoma phylloides	0	2	0	0
Galactocele	0	2	0	0
Gynaecomastia	2	0	0	0
Cyst	0	2	0	0
Others	0	2	0	3
<b>Total</b>	<b>9 (18%)</b>	<b>20(40%)</b>	<b>-</b>	<b>21 (42%)</b>

**Table IV** Nipple Discharge as Symptoms

Lesion	No. Of cases	Percentage
Fibroadenoma	-	-
Fibroadenosis	2/10	20%
Duct Ectasia	½	50%
Galactocele	½	50%
Total	4/50	8%

The longest duration of symptoms at presentation was noted in 48 years old women with a ductal hyperplasia of twenty years (Table III B). Nipple

discharge was present in only 4 out of 50 (Table IV) cases, whereas a serious or dark brown discharge was observed in two cases of fibroadenosis and one case of milky discharge. In this study, it was found that those with fast growing lumps presented earliest within two months of the onset of symptoms.

**Table V** Right v/s Left Distribution of Lumps

Diagnosis	Side		
	Right	Left	Both
Fibroadenoma	13	10	4
Fibroadenosis	3	2	5
Cystosarcoma phylloides	1	1	0
Galactocele	0	2	0
Simple cyst	2	0	0
Gynaecomastia	2	0	0
Inflammatory	1	2	0
Others	1	1	0
<b>Total</b>	<b>23(46%)</b>	<b>18(36%)</b>	<b>9(18%)</b>

Details regarding parity and menstruation were available in most of the cases. Menstrual abnormalities like dysmenorrhea, menorrhagia etc., were present in 20%. Most patients also complained of premenstrual breast pain. The type of benign lumps, were however related neither to the parity nor to the menstrual disturbances. There was a slight but insignificant preponderance of lesions in the right breast as compared to the left (Table-V). 46% of the lesions were located in the right breast whereas 36% were situated in the left breast and 18% bilaterally. The Lumps obeyed the established clinical features except when previous surgery restricted mobility or caused skin adherence.

**Table VI** Quadrant-wise Distribution of Lumps

Quadrant	No. of cases	Percentage
Upper outer	25	50%
Lower outer	13	26%
Upper Inner	5	10%
Lower Inner	1	2%
Subareolar	5	10%
>1 Quadrant	1	2%

**Table VII** Number of Lumps per case

Number of lumps	No. of cases	Percentage
One	31	62%
Two	7	14%
Three	2	4%
Four	-	-

**Table VIII** Size of Lumps

Size	No. of cases	Percentage
Upto 2 cm	12	24%
2 to 5 cm	27	54%
>5 cm	11	22%

The quadrant wise distribution of the lumps (Table - VI) showed an excess of lesions in the upper half of the breast especially the upper and outer quadrant 50% of the lumps were found to occupy this quadrant while 10%, 26% and 2% were located in the upper inner, lower outer and lower inner quadrant respectively. The remainder (10%) was found in the sub areolar region and 2% occupied more than one quadrant.

62% of the patients had only solitary lump. The other patients include 14% with two lumps, 4% with 5 Lumps in (Table-VII). Bilateral diffuse granularity was noted in 80% of the patients in the fibroadenosis on histopathology. Amongst those with fibroadenoma 62% patients had more than one Lump at presentation whereas the corresponding figure for fibroadenoma was 2 (Table-VII).

Majority of the lumps (54%) had a size of 2 to 5cms (Table-VIII). The size of the lump was large in the benign cystosarcoma group (15 x 10x 10cm), but the largest lump in the fibro adenoma group was seen in a 19-year-old girl with 8 x 6 cm fibro adenoma on the right side. Among the other lumps, anti-bioma presented with hard lump mimicking malignancy. Galactocele presented with firm swelling and were diagnosed on aspiration. Lymph nodes were palpable in 20% of the cases on the same side as the lumps. The lymph nodes were distributed uniformly among the various subgroups of lumps. Two cases of breast abscess were treated one of which had previous diagnosis of ductectasia.

### Mammography

Mammography being expensive investigation was performed in selective cases, the criteria being higher age group (beyond 4th decade) and clinically doubtful lesions.

In this series mammography is available in 5 cases. In one case mammography was done elsewhere and report was suggestive of fibro

adenoma. The report in other 3 cases was features suggestive of benign lesion and final diagnosis were cystosarcomaphylloides, fibro adenoma and fibroadenosis respectively. In one case mammography was done to know progression of lump size, which was diagnosed as fibro adenoma and was conservatively managed.

### Fine needle aspiration cytology

**Table – IX** Accuracy of Fine needle aspiration cytology (FNAC)

Diagnosis	No. of Cases	FNAC	
		Consistent	Non consistent
Fibroadenoma	27	22(81.5%)	5(18.5%)
Fibroadenosis	10	7(70%)	3(30%)

Fine needle aspiration cytology (FNAC) was done in almost all the cases in this study, of the 27 cases of fibroadenoma for which FNAC was done, the diagnosis was suggested in 81.5% of the cases. The corresponding figure for fibroadenosis was 70%, One case of benign cystosarcoma was diagnosed by FNAC. Antibioma showed inflammatory cells in FNAC. There was no false positive cytologic diagnosis of malignancy in the cases analyzed.

### Surgical Management

**Table XI** Type of Surgery performed

Lesion	Excision	Sub-cutaneous Mastectomy	Simple Mastectomy	Incision & Drainage
Fibroadenoma	22	-	-	-
Fibroadenosis	3	-	-	-
Cystosarcoma phylloides	1	-	1	-
Galactocele	2	-	-	-
Breast abscess	-	-	-	2
Gynaecomastia	-	1	-	-
Antibioma	1	-	-	-
Sclerosing adenosis	1	-	-	-
Ductual hyperplasis	1	-	-	-
<b>Total</b>	<b>31</b>	<b>1</b>	<b>1</b>	<b>2</b>
<b>Percentage</b>	<b>62%</b>	<b>2%</b>	<b>2%</b>	<b>4%</b>

Of the 50 cases simple excision of the lump was performed in 31 (62%) of cases. Subcutaneous mastectomy was done in the solitary case of gynaecomastia. Simple mastectomy was resorted

### Management

**Table X** Conservative Management

Lesion	No. Of cases
Fibroadenoma	7
Fibroadenosis	5
Simple cyst	2
Gynaecomastia	1

Five cases of fibroadenoma, seven cases of fibroadenosis, Two cases of simple cyst and One case of gynaecomastia were managed by conservative measures (Table, X).

Selected cases of fibroadenoma of less than 2 cm in size were reassured and asked for regular follow up. The size of lump was noted on every visit. Out of five cases followed upto six months, three case showed no increase in the size of the lump, though, no regression in the size was noted. Two cases did not turn up for follow-up.

Conservative management of breast pain and nodularity was in the form of reassurance, dietetic changes, and avoidance of oral contraceptive pills. These patients were put on a course of capsule Evion i.e. Vitamin E preparation for three months, which was continued for next three months, if required. No hormonal therapy was administered in any of these cases. Three cases had excellent results with no pain and two of the patients had bearable pain at the end of follow-up ranging from three months to one year. Two cases showed poor response with residual pain.

to treat a case of huge cystosarcomaphylloides. Incision and drainage was done for two cases of breast abscess due to duct ectasia.

**Follow-Up****Table XII** Follow up and recurrence

Symptoms	No. of cases
Breast Pain	5/20
Lumpiness	4/12

A total of 20 patients were available for follow-up. The follow up period ranged from three to eighteen months, 9 of the patients followed up had symptoms related to breast disease, 5 complained of breast pain, 4 had lumpiness of the breast, 5 were noted to have a small lump, which was treated conservatively, showed no increase in size. There was no recurrence in simple cysts, which were aspirated. One case of gynaecomastia managed conservatively showed spontaneous regression.

**Discussion**

A total of 50 cases of benign breast disease were studied upon during the two-year period (March 1999 to Feb 2001). The spectrum of the disease remained more or less uniform throughout the study period. Benign breast disease occurs predominantly in women during reproductive life. Fibroadenoma tends to occur in younger women compared to fibroadenosis<sup>11</sup>. Which presents more frequency in the perimenopausal women. This is thought to be related to the anovulatory menstrual cycles during this period. In the current study. 46% of the lesions (Table-t) occurred in the third decade of life, whereas 10% and 24% presented in the fourth and second decades respectively. Tibor Decholnoky<sup>28</sup> reported a similar age distribution, while in J. C. Cuptaro study, 85% of the patient were in the age group of twelve to forty years. 24% of the patients were teenagers in this study. Majority (89%) of them had fibroadenomas whereas less than 5% had fibroadenosis. A study from West Indies<sup>17</sup> showed that 25% of the benign breast lumps occurred in the teenage group, while a study from Jabalpur<sup>10</sup> reported for 33%. In this study 70% of the fibroadenoma presented in the age group of 11 to 30 years. The corresponding figures in literature include 70% reported by Haagensen<sup>11</sup> and 82% in a study from Madras<sup>20</sup>. Almost 100% of the patients with fibroadenosis

were between 20 and 40 years average age being a decade more compared to fibroadenoma.

About 11% of the fibroadenosis patients in this study presented in the second decade compared to 3% recorded by Startwell<sup>24</sup>. Regarding benign cystosarcomaphylloides the patients we had, presented at the age of 35 to 40 years. Haagensen<sup>11</sup> found 60% of his patient to be aged between third and fifth decade of life.

Over 40% of women are said to have evidence of fibroadenosis at some time or the other during their lifetime<sup>30</sup>. Although fibroadenosis such a common lesion of the breast, it is seldom operated on. Thus, in this study, fibroadenosis form only 20% of the cases white fibroadenoma accounts for 54% of the cases (Table - II). These findings are consistent with J.C. Gupta et al<sup>10</sup> who found that fibroadenomas and fibroadenosis constituted 64% and 22% respectively, of the fibroadenomas and fibroadenosis constituted 64% and 22% respectively of the benign breast lumps in the Jabalpur area. Rangabashyam<sup>20</sup> reported a similar incidence at Madras while Oluwole et al<sup>27</sup> reported similar figures in American black.

In most of the studies from the west, gross cysts or macrocysts are commonest benign breast lumps, However in the current study, two gross cysts were encountered. J. C. Gupta et al<sup>10</sup> also did not encounter, many gross cyst in his study.

**Etiology**

In the prospective study an attempt was made to find the prevalence of use of oral contraceptives among the patients. However, there was no control group and so definite conclusion, are not possible. The controversy regarding the association of oral contraceptives and benign breast disease still rages on in the west<sup>30</sup>. Initial studies showed a beneficial effect of oral contraceptives in reducing benign breast disease later studies, using newer formulations of oral pills, failed to corroborate these findings. The extremely low prevalence i.e. 20% of use of oral pills in the present study does not permit any meaning full conclusion.

### Clinical Features

In the present study, 68% of the patients had symptoms of less than one-year duration. The duration ranged from one week to twenty years (Table III). These figures are in agreement with Tibor Decholnoky's<sup>28</sup> study. As in most studies, the presence of a breast lump was the commonest symptom (80%) of the cases. pain was present in 24% of The patients. Tibor Decholnoky,<sup>s28</sup> noted pain in 55% of his patients. In the present study, 80% of the patients with fibroadenosis had pain. In the present study, nipple discharge from the patients was present in only 8% of the patients. Tibor Decholnoky,s had no patients with nipple discharge (Table - IV). Duct papillomas most commonly present with nipple discharge, whereas this symptom was less common in fibroadenosis and rare in fibroadenoma

None of the patients in the present study gave any history of reduction in size or disappearance of breast lumps. But 5 cases treated conservatively in this study, showed no progression in size of the lump, though regression in the size was not seen. This is in contrast to Wilkinson<sup>32</sup> who noted spontaneous resolution of fibroadenoma in 16% of his patients. It is generally accepted that upto 10% of fibroadenomas less than 2 cm in size regress spontaneously. The later presentation and larger average size in the present study as compared to the west may account for the absence of spontaneous resolution.

In the present study, details of menstrual and obstetric history were available for almost all the cases, 6ryo of the patients were nulliparous compared to the 650/0 noted by Tibor Decholnoky's<sup>28</sup> and 21% by Sartwell<sup>24</sup>. The difference may be due to the early marriage in our country. Menstrual abnormalities were noted in 20% of the cases in the present study. These were uniformly distributed among the various sub groups. In this present study, only 4 women who were postmenopausal. Benign breast disease in rare after the reproductive years. It is generally felt that benign breast lumps must have originated in the premenopausal age but came to notice only

after menopause. The duration of lump in this group on an average was three years compared to with less than one year in the premenopausal age. There was a mild preponderance of lesions in the right breast in this study. The difference is however, not significant. 50% of the lesions were located in the upper and outer quadrant of the breast. Tibor Decholnoky's<sup>28</sup> noted that 50% of the lump in his study were in this quadrant of the breast, while Oluwole et al<sup>27</sup> found 60% of the lumps at this site. This finding is related to the large amount of breast parenchyma in this quadrant as compared to the others. Multiple Lumps were present in 18% of the patients in this study. This is slightly higher than the 17% reported by Geschickters<sup>9</sup> and 16% each in both Oliver's and Haagensen's studies. A study from Madras<sup>20</sup> found multiple lumps in 27% of cases. The distribution of multiplicity among the major sub groups was uniform.

Majority of the lumps (54%) in the present study averaged 2 to 5cms in size (Table - III). Benign breast lumps, especialty fibroadenomas progress slowly after attaining a size of 2 cm. Tibor Decholnoky's<sup>28</sup> study showed that 57% of the benign lumps were less than 2 cm whereas the corresponding figure in the current study was 24%. The late presentation, which is common in our country, may explain this wide disparity and the lack of spontaneous resolution noted in this study. It is common that benign cystosarcoma-phylloides always present with large masses. But Ilaagensen<sup>11</sup> emphasized that 28% of his cases were less than 5 cm, In the present study we came across two cases which was more than 15 cm. Giant fibroadenoma had been defined by Block<sup>1</sup> as a fibroadenoma occupying a major portion of the breast or weighing more than 500gms. Two cases of galactocele presented with firm masses in the breast within 6 months of cessation of lactation. The two cases of mammary duct ectasia presented with complications such as abscess. Antibioma of the breast presented as hard mass mimicking malignancy. No case of tuberculosis or filariasis was not included. Rangabashyam et al<sup>20</sup>

found 5 cases of filarial breast in a five-year study from madras.

#### **Fine Needle Aspiration Cytology (Table IX)**

This investigation was done in almost all the cases, basically to clear the doubts of clinical diagnosis. 81.5% of fibroadenoma could be diagnosed correctly by FNAC, whereas 70% of fibroadenomas were diagnosed. Inflammatory lesions (Antibioma) were detectable by FNAC. The key role of FNAC in the management of benign breast lesions is to rule out malignancy. The further segregation into the subtypes with FNAC may not be very important in management. However, in combination with clinical examination and mammography, it aids in the conservative management of small lumps or postpone surgery in younger patients and also in avoiding surgery for fibroadenosis.

#### **Surgical Treatment (Table - XI)**

Majority of the benign lumps underwent simple excision of lumps (62%).

Subcutaneous mastectomy was performed in the solitary case of gynaecomastia preserving nipple and areolar complex. A case of cystosarcoma phylloides occupying the entire breast underwent simple mastectomy, Calactoceles had to be excised in two patients. These treatment modalities are in agreement with accepted principles. The correlation between clinical and histopathological diagnosis was best for fibroadenoma. The figure 76% in this study agrees well with the 75% reported by Wilkinson. A clinical diagnosis of carcinoma breast was considered in 8% of the cases of fibroadenosis, 3% of the fibroadenoma, two cases of antibioma. These figures may be explained by the older age of the patients with fibroadenosis and the hardness of the lumps in antibioma.

#### **Follow, up and recurrence (Table - XII)**

20 of the patients were followed up for periods ranging from three to eighteen months. While many of these had complaints regarding breast disease only.

There was no recurrence of fibroadenoma in our series. Recurrence in Ilaagensen's series<sup>11</sup> is 16%. The follow up may account for this difference. In the teenage group, there was no relationship noted in the present study between the size and number of fibroadenoma to recurrence.

Retrospective study from the West Indies<sup>27</sup> recommends observation of fibroadenomas in teenagers as up to 10% may resolve spontaneously and another 10% may develop multiple lumps necessitating repeat surgery. Ilaagensen also recommends that fibroadenomas less than 5 cm in size in young women may be followed up. But, 5 cases of fibroadenomas managed conservatively in our series did not show progression. None of the patients had any regression of lumps. However, the present study suffers from the drawback of lacking a control group and short follow up. A prospective study with a longer follow up period is necessary to reach definite conclusions.

The patients with benign cystosarcoma phylloides could not be followed up. Chua et al reported a recurrence of 15.8% in his study of benign cystosarcoma. The generally accepted figures for recurrence in these cases is 20%. The reason for the recurrence is that small cystosarcomas are mistaken for fibroadenomas and excised without an adequate margin (.2 cm is now recommended). Intraoperative frozen section biopsy is being recommended by some authors to detect cystosarcoma in doubtful cases. FNAC also could be utilized for this purpose. The histopathology of benign cystosarcoma does not change with recurrence in the majority of instances.

#### **Conclusion**

The findings of this clinico-pathological study of benign breast lumps collaborates with the findings of earlier works in most aspects, but differs with respect to the management of fibroadenomas in teenagers.

The conclusions are as follows:

- The commonest benign breast lesion encountered in the present study was



fibroadenomas constituting 54% followed by fibroadenosis in 20%

- Fibroadenoma presents most often in the second and third decades, while fibroadenosis presents a decade later.
- Although, fibroadenosis is common in the general population, it is the fibroadenoma, which are operated upon more often.
- The mode of presentation is almost always with a lump in the breast associated often with pain but seldom with discharge, the exception being duct papilloma.
- Galactocele was the third most common breast lesion in this study.
- The other benign lesions such as sclerosing adenosis, duct hyperplasia and duct ectasia etc. were mostly diagnosed at histopathology; lesions such as antipapilloma were commonly mistaken for malignancy.
- There was no recurrence during period of followup and no malignant transformation in any benign breast disease.
- No definite conclusions could be drawn from this study on the use of oral contraceptives. No spontaneous regression of benign breast lumps were noticed during this study, especially with regards to fibroadenoma. In addition fibroadenomas are a great source of great anxiety in the teenage period. In view of these facts, fibroadenomas in teenagers are probably better dealt by surgery.
- Health education, awareness, literacy can help in early detection of breast disease and appropriate therapy.
- Breast self-examination as advised by Haagensen is good method of early diagnosis of lesions.

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