



Surgery

“A CLINICAL STUDY ON ABERRATIONS OF NORMAL DEVELOPMENT AND INVOLUTION OF BREAST AND ITS MANAGEMENT IN UPPER ASSAM”

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ABSTRACT ANDI of breast is a common phenomenon. They are more common than breast malignancy. In this study an attempt was made to study the spectrum of diseases that come under ANDI of breast, their clinical presentation, treatment and also to find out the clinical and cytohistological correlation. Study group includes 152 cases of Upper Assam who attended the Surgery OPD of AMCH during the study period and also all the patients who were admitted in the department of surgery under the clinical diagnosis of ANDI of breast. Confirmation of diagnosis was made on the basis of history, clinical examination, pathological and radiological investigations. Pathological investigations include FNAC and HPE. Radiological investigations include Ultrasonography and mammography.

The following observations were made in the present study:

- The commonest disease encountered was fibroadenoma of breast (14.47%) followed by mastalgia (23.68%) fibrocystic disease (14.47%) breast cyst (9.87%). The less common are duct ectasia, sclerosing adenosis and phyllodes tumour, 9.87% each.
- Majority are present in the second, third and fourth decades of life. All fibroadenoma, fibrocystic disease and phyllodes tumour are present in the third decade. Youngest patient was of 11 years and oldest was of 47 years. mean age of presentation was 27.45 years and the standard deviation was 7.13.
- 86.84% had regular menstrual history and 13.16% had irregular menstrual history. Majority were nulliparous (46.05%). The highest parity was 4.
- 94.08% did not give history of OCP use and 98.68% did not give history of lactation.
- The commonest presentation was pain in the breast (76.32%) followed by lump (71.05%).
- Majority cases presented to the hospital within 3-6 months of their onset of symptoms. The minimum duration of symptom was 1 month and the maximum was 12 months.
- Right breast was involved more commonly 96.84% than the left (38.16%).
- Upper outer quadrant was involved most commonly involved (34.21%) and the least commonly involved was the central quadrant (1.32%).
- The majority of the breast lumps (85.05%) had size less than 5cm in their greatest dimension. 14.95% had size more than 5cm.
- 63.82% of the lumps had firm consistency whereas 6.58% had soft consistency. There was no positive family history in majority of the patients (89.47%).
- The correlation between clinical diagnosis and histopathological diagnosis had the following findings: For fibroadenoma the sensitivity of FNAC is 84.9% and HPE is 86.54%. Both have positive predictive value of 100%. For breast cyst the sensitivity of FNAC is 93.3%. For phyllodes tumour the sensitivity of FNAC is 85.7% and HPE is 75%.
- In the management, 41.45% cases underwent excision followed by aspiration of cyst in 7.89%, microdochectomy in 7.24%, wide local excision in 3.29% and simple mastectomy in 1.97%. Among conservative treatment 14.47% were given evening primrose oil, 12.50% were given topical analgesic and breast support and danazol was given in 5.26%. The cases were followed up at three monthly interval for a period of one year and there was no recurrence during this period.

KEYWORDS : ANDI, FNAC, HPE, Fibroadenoma, PhyllodesTumour, Nulliparous.

INTRODUCTION

The breasts, a secondary sexual structure in females, is an apocrine gland – a modified sweat gland derived from the ectoderm. It acts as mammary glands in females and produce and secrete milk to feed the infants. It is rudimentary in males. Breast, a dynamic structure, whose development and function are initiated by a variety of hormonal stimuli including estrogen, progesterone, prolactin, oxytocin, thyroid hormone, growth hormone and cortisol. Estrogen initiates ductal development while progesterone is responsible for differentiation of epithelium and for lobular development. Prolactin is the primary hormone responsible for milk production in late pregnancy and the post partum period. Neurotrophic hormones secreted from the hypothalamus is responsible for the secretion of hormones that affect the breast tissue. It undergoes changes throughout a woman's reproductive life and superimposed upon this cyclical changes occur throughout the menstrual cycle. The epithelium and stroma of breast can give rise to both benign and malignant lesions. The pathogenesis of benign breast diseases involves disturbances in the breast physiology extending from an extreme if normality to well defined disease process.

Benign breast disease is the most common cause of breast problems and it is estimated that upto 30% of women will suffer from a benign breast disorder requiring treatment at some time in their lives. These are seen usually in the reproductive period of lives as they are

hormonally induced and there is a dramatic fall after menopause due to cessation of clinical ovarian stimulation. Most common presenting complaint is a breast lump (40%) and most women fear it to be cancer. So, the aim of treatment is to exclude cancer and after that treat the remaining symptoms. Benign conditions of the breast are neglected in comparison to cancer, despite the fact that only 10% patients presenting to a breast clinic suffers from cancer. All studies till 1970 were directed towards a possible relationship to cancer, rather than finding out the basic processes underlying benign conditions. The use of imaging techniques and needle biopsies have made the diagnosis of a benign breast disease possible without undergoing without surgery in the majority of patients avoiding unnecessary surgical procedures. However the pathologists, radiologists and oncologists should recognize benign lesions, both to distinguish them from in situ and invasive breast cancer and to assess a patient's risk of developing breast cancer, so that the most appropriate treatment modality can be established. The concept of ANDI is gaining acceptance. ANDI is a term used to describe most benign breast diseases. It is based on the fact that most benign breast diseases are minor aberrations of the normal processes of development, cyclical hormonal response and involution.

Previously there was a tendency to include all the benign breast disorders and pathology under the designation of Fibrocystic Disease. This term when applied to a biopsy or a palpable breast mass is non

specific and often include morphologic and physiologic changes in the breast along with specific benign disease process. Another term used in this regard is Mammary Dysplasia. The purpose of ANDI is to refrain from calling normal changes a disease and to eliminate confusion. The term ANDI was first coined by LE Hughes at Cardiff Breast Clinic in 1987. The generic term ANDI which stands for Aberrations of Normal Development and Involution is introduced to allow breast problems to be placed within an overall framework of pathogenesis; this concept also permits more detailed individual assessment with respect to normality and disease. A framework for understanding and management of benign breast disorders is presented based on the notion that most breast complaints can be explained as minor aberrations of the normal process of development, cyclical change and involution. Fibrocystic diseases and its synonyms are discarded in favour of terms that are strictly descriptive of the clinical and /or histological picture.

METHODS

SOURCE OF DATA

Female patients of Upper Assam who came to Surgery OPD of AMCH and also the patients admitted in the Dept of Surgery AMCH with clinical diagnosis of ANDI of breasts during the study period were taken up for study.

METHOD OF COLLECTION OF DATA

These patients were interviewed on the basis of proforma designed for the study which included clinical features, clinical findings, investigations, treatment and complications that may arise following treatment. The cases are selected on random sampling basis.

Duration – One Year

Study Design – Hospital Based Observational Study

Sample Size – Female patients of Upper Assam who came to Surgery OPD of AMCH and also the patients admitted in the Dept of Surgery AMCH with the clinical diagnosis of ANDI of breasts during the study period.

Inclusion Criteria

- female patients of Upper Assam who attended the Surgery OPD and those who were admitted in the Dept of Surgery AMCH with clinical diagnosis of ANDI and who were to undergo investigations and treatment.
- patients were followed up on monthly basis for a total period of minimum 3 months.

Exclusion Criteria

- cases of malignant breast lump as per FNAC findings.

Cases were taken up on the basis of the following presenting complaints:

- Lump, 2. Lump+pain, 3. Pain, 4. Lump + pain + discharge, 5. Lump + pain + fever.

Investigations done

- Routine Blood
- RBS
- Urea
- Creatinine
- Blood group
- Urine for albumin sugar and microscopy

Special Investigations

- FNAC
- Excision Biopsy
- Mammography
- USG of Breasts

Follow up has been done on the basis of the following complications mainly:

- Recurrence
- Wound infection
- Hemorrhage

OBSERVATIONS AND RESULTS

Most of the patients (28.29%) in our study were in the age group of 21-25 years. The mean age is 27.45 years and standard deviation is 7.13 years. There is no patient above 60 years. 6 patients are above 40 years and 23 patients are below 20 years.

Majority of the population were Hindu (63.16%) followed by Christian (18.42%). Rest belonged to Islam (8.55%), Buddhism (4.61%) and others (5.26%). 39.47% belonged to rural areas whereas 34.21% hailed from urban locality and 26.32% belonged to semiurban area. 55.92% of the cases were married and 44.08% unmarried.

54.61% cases attained menarche between 13-15 years of age and 40.79% attained between 9-12 years. Only 4.61% attained menarche above 15 years. The highest age of menarche is 17 years. The menstrual history was regular in 86.84% and irregular in 13.16%. Thus most of the cases in our study had regular menstrual history. 46.05% cases were nulliparous, 34.87% cases had parity between 1-2 and 19.08% had parity between 3-4. The highest parity was 4. Only 5.92% cases gave history of use of oral contraceptives. Rest 94.08% cases did not give history of oral contraceptives. 1.32% cases gave history of lactation and 98.68% did not give history of lactation.

Pain was the chief complaint in most of the cases (76.32%) followed by lump in 71.05% and discharge in 7.24%

DURATION OF PAIN

Out of 116 cases coming with pain the duration of pain was 3-6 months found in 44.83% followed by 1-3 months in 39.66%, 7-9 months in 14.66% and 10-12 months in 0.86%. The maximum duration was for 12 months. The mean duration for pain was 4.33 months with a standard deviation of 2.17 months.

DURATION OF LUMP

Out of 108 cases presenting with lump the highest number of cases that is 30.56% presented with a lump of duration 3-6 months. 27.78% cases had lump for 7-9 months, 19.44% had lump for 1-3 months, 12.04% had lump for more than 12 months and 10.19% had lump for 10-12 months. The maximum duration was 36 months. The mean duration was 9.12 months with a standard deviation of 9.29 months.

BREAST PROFILE

In 61.84% cases right breast was involved and 38.16% had disease in the left breast. Bilateral involvement was not found in our study. 85.05% cases had size of lump less than 5cm in their greatest dimension and 14.95% cases had more than 5cm in the greatest dimension. 52.63% cases of breast lump had well defined border whereas 17.76% of the lumps had ill defined border. All the fibroadenoma cases presented with well defined lumps. The surface was smooth in 60.53% cases nodular in 7.24%, granular in 1.97% and bosselated in 0.66%. Fibroadenoma, fibrocystic disease and breast cyst presented with smooth surface. Nodular was found in phyllodes tumour and sclerosing adenosis, granular surface was found in sclerosing adenosis and bosselated was found in phyllodes tumour. 63.82% cases of breast lump had firm consistency whereas 6.58% cases had soft consistency. 10 cases which is 6.58% of breast cyst had lump of soft consistency. Breast fixity was present in 13.16% cases and rest 57.89% of the lumps were mobile.

FAMILY HISTORY

Similar disease was not found in the family of 89.47% cases whereas it was present in 10.53% of the families.

BIRADS CATEGORY

Mammography was done in 13 cases out of which lesions were categorized as BIRADS 3 in 53.85% and BIRADS 4 in 46.15% cases. BIRADS 0, 1, 2, 5 and 6 were not found in our study. Out of 97 cases where ultrasonography was done

CLINICAL DIAGNOSIS

CLINICAL DIAGNOSIS	NUMBER (n)	PERCENTAGE (%)
Fibroadenoma	45	29.61
Mastalgia	45	29.61
Fibrocystic Disease	23	15.13
Breast Cyst	14	9.21
Giant Fibroadenoma	9	5.92
Carcinoma	8	5.26
Phylloides tumour	6	3.95
Periductal Mastitis	2	1.32
TOTAL	152	100.00

FNAC

FNAC	NUMBER (n)	PERCENTAGE (%)
Fibroadenoma	53	56.38
Breast Cyst	15	15.96
Duct Ectasia	9	9.57
Within Normal Limits	8	8.51
Phylloides tumour	7	7.45
Periductal Mastitis	2	2.13
TOTAL	94	100.00

FNAC was done in 94 cases where 56.38% came out to be fibroadenoma, 15.96% came out as breast cyst, 9.57% came out as duct ectasia, 7.45% were diagnosed as phyllodes tumour, 2.13% were diagnosed as periductal mastitis. The FNAC came out to be within normal limits in 8.51% cases.

USG FINDINGS

USG FINDINGS	NUMBER (n)	PERCENTAGE (%)
Fibroadenoma	54	35.53
Fibrocystic Disease	23	15.13
Duct Ectasia	11	7.24
Hypoechoic Mass	8	5.26
Simple Breast Cyst	8	5.26
Phylloides tumour	6	3.95
Breast Cyst	4	2.63
Complex Breast Cyst	2	1.32
Within Normal Limit	36	23.68
TOTAL	152	100.00

Ultrasonography was done in all the 152 cases out of which the maximum number that is 54 cases (35.53%) were diagnosed as fibroadenoma followed by 23 cases (15.13%) as fibrocystic disease, 11 cases (7.24%) as duct ectasia, 8 cases (5.26%) of hypoechoic mass and simple breast cyst each, 6 cases (3.95%) were diagnosed as phyllodes tumour, 4 cases (2.63%) were breast cyst and 2 cases (1.32%) of complex breast cyst. 36 cases (23.68%) were within normal limit.

HISTOPATHOLOGICAL EXAMINATIONS

HISTOPATHOLOGICAL EXAMINATIONS	NUMBER (n)	PERCENTAGE (%)
Fibroadenoma	52	62.65
Breast Cyst	15	18.07
Phylloides Tumour	8	9.64
Sclerosing Adenosis	8	9.64
TOTAL	83	100.00

Histopathology was done in 85 cases. 61.18% came out to be fibroadenoma, 17.65% were breast cyst, 9.41% were phyllodes tumour and sclerosing adenosis each, 2.35% cases of fibrocystic disease.

TREATMENT

TREATMENT	NUMBER (n)	PERCENTAGE (%)
Excision	63	41.45
Evening Primrose Oil	22	14.47
Topical Analgesic + Breast Support	19	12.50
Aspiration	12	7.89
Microdochoctomy	11	7.24
Reassurance	9	5.92
Danazol	8	5.26
Wide Local Excision	5	3.29
Simple Mastectomy	3	1.97
TOTAL	152	100.00

POSTOPERATIVE COMPLICATIONS

POSTOPERATIVE COMPLICATIONS	NUMBER (n = 152)	PERCENTAGE (%)
Wound Infection	21	13.82
Seroma	21	13.82
Hematoma	6	3.95

FINAL DIAGNOSIS

FINAL DIAGNOSIS	NUMBER (n)	PERCENTAGE (%)
Fibroadenoma	44	28.95
Mastalgia	36	23.68
Fibrocystic Disease	22	14.47
Breast Cyst	15	9.87
Duct Ectasia	8	5.26
Giant Fibroadenoma	8	5.26
Phylloides Tumour	8	5.26
Sclerosing Adenosis	8	5.26
Duct Ectasia+Periductal Mastitis	3	1.97
TOTAL	152	100.00

In the present study follow up was done for a period of ranging from 1-12 months. there was no recurrence in any case of fibroadenoma,

fibrocystic disease, breast cyst, phyllodes tumour, sclerosing adenosis, duct ectasia and mastalgia.

DISCUSSION

This study consists of a total of 152 cases of ANDI of breasts studies for 12 months from April 2018 to March 2019 at the Department of Surgery in Assam Medical College and Hospital, Dibrugarh, Assam.

A sincere effort was made to correlate its results and observations with other published data.

Incidence and distribution of ANDI of breasts

Authors and years	Group size	fibroadenoma	Mastalgia	Fibrocystic disease	Phylloides tumour
OA Egwuonwu et al(2009)111	N=550	19	-	15.6	1.7
Malik et al(2010)112	N=683	57.8	-	9.3	0.5
Khanzada et al(2009)113	N=275	27	-	21	-
Abhijit MG et al (2013) 114	N=110	56.4	-	20.9	-
Sangma et al (2013)115	N=100	48	-	18	12
Present Study	N=152	44	36	22	5

in the present study the most common disorder if ANDI of breasts is Fibroadenoma (28.95% and 44 cases) followed by mastalgia (23.68% and 36 cases), fibrocystic disease (14.47% and 22 cases), breast cyst (9.87% and 15 cases). Duct Ectasia, giant fibroadenoma, sclerosing adenosis and phyllodes tumour were found to have equal incidence (5.26% and 5 cases). Duct ectasia with Periductal Mastitis have the lowest incidence (1.97% and 3 cases).

Fibroadenoma was the most common ANDI of breast in present study. This is in accordance with other studies as mentioned above in the table. As per the study conducted by Gupta JC et al (1983)116 the incidence of fibroadenoma was 64% and fibroadenosis is 22%. In another study by Choudhuri et al (2003) 117 which was a retrospective study of breast lumps sent for histopathological examination in Calcutta Medical College for a period of last 10 years, comparable result was found. a total of 30208 specimen of breast lump were sent during that period for histopathological examination out of which 2062 cases studied. 1528 cases were benign and 504 came out to be malignant. There also fibroadenoma came out to be the most common lesion, 950 cases. others included 150 cases of inflammatory breast diseases out of which 386 were fibrocystic diseases. The next common disease was mastalgia. This is in accordance to the study conducted by Sukanya et al (2015)118. The third most common disease is Fibrocystic Disease and it is in accordance with the other studies as mentioned in the table. The relative incidence shows some ethnic variations. in Indian women as reported by other Indian studies as well as in the present study and in black populations, fibroadenoma accounted for maximum cases whereas in White females fibrocystic disease is the commonest.

Age Incidence

in the present study, 15.13% cases were in the age group below 20 years, 28.29% in 21-25 years, 23, 68% in 26-30 years, 24.34% in 31-35 years, 4.61% in 36-40 years and 3.95% above 40 years.

Distribution of Fibroadenoma in age period 11-30 years

The peak incidence of fibroadenoma in all the above studies is between 11-30 years which is almost similar to the present study.

Distribution of fibrocystic disease in 21-40 years

Case series	Sushila khanna et al 119	Khanzada et al 113	Jabeen et al121	Rangabashyam et al120	Present Study
Percentage	58.53	68.42	65.1	70	77.27

The highest incidence of fibroadenoma is noted in 21-40 yrs and it is in

accordance with the previous studies.

Regarding benign cystosarcoma phyllodes patients have presented in between 28-60 years.

Relation of marital status, parity status and menstrual status

In the present study all the patients were in premenopausal period. Mostly second and third decade were influenced by intense endocrine activity. Out of 146 patients 82 were married and 64 were unmarried. 127 had regular menstrual cycle and 19 has irregular cycle. 67 were nulliparous and 79 had experienced pregnancy. only two had experienced lactation. Decholnoky et al 120 had 27.5% patients who experienced pregnancy and 63% were nulliparous. In a case series by Aisha Memon et al (2007)120 found that 98.6%of cases out of 294 cases were unmarried presenting with fibroadenoma. In the present study out of 44 fibroadenoma 30 were married. Alagar et al (2015)121 found that out of 80 cases of fibroadenoma 55 (62.5%) were married. None of the patients used oral contraceptive pills. Vessey et al (1972)122 found that they can be protective if taken for more than 2 years.

Clinical Features and Mode of Presentations

According to our study breast pain is the most common presenting symptom unlike the previous studies mentioned in the table. Monica Morrow124 in her study found that breast pain is the most common presenting symptom with which a women present to the breast clinic. It is also more common in premenopausal than post menopausal women. Another study by M Ohene et al 125 found that out of 1678 patients 1210(72.1%) have breast pain at presentation followed by breast lump in 312 patients (18.6%). Patient with fibrocystic disease presented with lump and pain. all the phyllodes tumour cases presented with breast lump. This is in accordance with the article published by Jenna Fetcher. 126

Size of the lump

Majority of the lumps were less than 5 cm in our study. 85.05% lumps were less than 5cm in their greatest diameter and 14.95% were greater than 5 cm in their greatest diameter. There was no relation to the duration with size of the lumps. Fibroadenomas progress slowly after attaining a size of 2cm.

In Sangma et al 115 largest giant fibroadenoma was of size 7*9 cm and largest benign phyllodes tumour was of size 15*17cm while in our study the largest phyllodes tumour was if size 8*9cm and the largest giant fibroadenoma was of 8*6cm. In symmer's series(1978)127 the fibroadenoma of breast rarely exceeds 3.5cm in its longest diameter although sometumours can be 8c aswell. Haagensen emphasized that 28% of the cases were less than 5cm45. And Tibor Decholnoky's 128 study shows that 57% of breast lumps were less than 2cm. it is common that benign phyllodes tumour always present with large tumours. In the present series, the size of fibroadenoma ranges from 1-5cm in their longest diameter that shows similarity with previous literature., Stephenson et al(1952)129 and Haagensen et al 72 who had found that majority of phyllodes tumour were in range of 1-15cm in diameter.

Duration of symptoms

In the present study the duration of symptom for breast lump was 62. 33% had less than 12 months duration and 8.22% had more than a year, 76.71% had presented with breast pain of less than 12 months. These figures are in with the Tibor de Cholnoky 128 study.

The following table shows the comparison between Haagensen series72 and the present study in relation to the duration of lump, which shows almost similar results.

Quadrant wise distribution of Lump

Upper outer quadrant was the common site of distribution of lump(32.19%) when compared to other quadrant. This was almost similar to the studies done by Premila DeSouzaRocha et al (1997)130 and OA Egwuonwu et al (2009)11. Hughes, Mensel et al in benign diseases and disorders of breast have stated that benign breast lumps are more common in the upper outer quadrant. Tibor Decholnoky 128 noted that 50% of the breast lumps in his study were in the upper outer quadrant. This finding is related to the large amount of parenchyma in this quadrant as compared to the other quadrants. In this study fibroadenoma and fibroadenosis most commonly involved the upper outer quadrant. cystosarcoma phyllodes and giant fibroadenoma are usually large and involve more than one quadrant.

Side of the breast involved

There was equal distribution of lesions in both right and left breasts, right breast having 69 cases (47.26%) and left breast having 64 cases (43.84%) and 13 cases (8.9%) were bilateral.

Histopathological examination of fibroadenoma

In the present series the entire excised specimens were sent for histopathological examination. out of 65 specimen 48 (32.88%) were fibroadenoma, 15 (10.27%) were breast cyst, 8 (5.48%) were phyllodes tumour and sclerosing adenosis. Of 48 cases of Fibroadenoma highest incidence of pericanalicular variety (48.2%) followed by mixed and intracanalicular variety. this is in accordance with the previous study done by Arno Kuijper (2001) 132

Clinical and cytohistologic correlation

For fibroadenoma the sensitivity of FNAC in our study is 84.9% and the sensitivity of HPE is 86.54%. For breast cyst the sensitivity of FNAC is 93.3%. For phyllodes tumour the sensitivity of FNAC is 85.7% and the sensitivity of HPE is 75%. In the present study FNAC was done in 90 cases and HPE was done in 81 cases and all the FNAC reports were indicative of the benign nature of the disease.

According to Lopez – Ferrer et al (1999) 132 cytohistologic agreement was present in 287 of the 362 cytodiagnosis. Lack of correlation was observed in 75 cases. The sensitivity of the cytologic diagnosis of Fibroadenoma was 86.9% with PPV 79.3%. The specificity of the cytologic diagnosis of Fibroadenoma reaches 93.8% with NPV 96.3%. Hand Uma et al 133 in their series of 360 FNACs as efficacy of 98.3% in diagnosis. In a study by Sangma et al 115 found that the clinical diagnostic accuracy of Fibroadenoma was 92%. In the study of Abhijit MG et al 114 sensitivity of clinical diagnosis was 91.1% and cytology was sensitive in 100%.

As shown above FNAC was a very useful tool in diagnosing benign breast disease under ANDI classification and in differentiation of benign diseases from cancer. It is a more accurate tool for diagnosis as compared to clinical findings and can avoid unnecessary surgery. However compared to biopsy and histopathology FNAC is less accurate. Recently trucut biopsy, vacuum assisted biopsy are being preferred over FNAC as more tissue is obtained for diagnostic accuracy similar to HPE.

Treatment

Non surgical Management

In the study of 151 cases 75 cases were managed conservatively and rest had to undergo intervention. Of the 75 cases that 41 were managed conservatively and they were mastalgia, fibrocystic diseases, sclerosing adenosis and duct ectasia****. Danazol was given to 7 cases of mastalgia, 9 cases of mastalgia were managed by reassurance and counselling, and 18 cases were given topical analgesics and breast support. According to Larsen TK et al (2003)134 fibroadenomas in adolescents can be treated conservatively. however for adult women a negative triple test is required to undergo conservative management. Houssami N. Cheung MN et al (2001)135 found that conservative approach is safe and acceptable provided the result of triple test is negative for cancer and consistent with a fibroadenoma

Surgical Management

71 cases were managed surgically out of which 12 underwent aspiration **** and all of them were cases of simple breast cyst, excision was done in 51 cases of fibroadenoma and giant fibroadenoma, simple mastectomy in 3 cases of comparatively larger and wide local excision in 5 cases of phyllodes tumor****. Most of the cases of fibroadenoma were excised by circumareolar incision but some of the cases were difficult to excise by the circumareolar incision where radial incision was used. Fibroadenoma are commonly treated by local excision (haagensen, 72, Farquharson, 2005 137 and Bailey and Love 45). The approach of excision in young women is different than in older women. Minimal amount of reast tissue should be removed. cosmetic incision around the areola is the most commonly used technique. In our study there were 8 cases of phyllodes tumour out of which 5 underwent wide local excision and 3 underwent simple mastectomy due to larger size comparatively. Treatment of benign phyllodes tumour is wide local excision or enucleation for young women. Massive, recurrent and malignant phyllodes will require mastectomy (bailey and Love 45). And without axillary sampling or clearance (Farquharson's 135)

FOLLOW UP AND RECURRENCE

In the present study patients were followed up at 1 monthly interval for a period of maximum 12 months and no recurrence was found during this period whereas Haagensen's series 72 found recurrence in 16% cases. However the present series suffers from the drawback of lacking a control group and short follow up. A prospective study with longer follow up period is necessary to reach definite conclusion.

CONCLUSION

Fibroadenoma was the most common disease under the ANDI of breasts followed by mastalgia and fibrocystic disease. Most of the disease occur in the third decade of life usually in the nulliparous women in premenopausal age group having less use of OCPs and lactation. Pain was the most common presentation followed by lump. Majority of the breast lumps were less than 5cm present in the upper outer quadrant of right breast. Clinical examination is a fairly good diagnostic tool for fibroadenoma with a sensitivity of 84.9% for FNAC and 86.5% for HPE. Excision is the best treatment for fibroadenoma whereas conservative treatment is ideal for mastalgia and fibrocystic disease. For breast cyst aspiration can be done if there is no recurrence and no evidence of malignancy. Sclerosing adenosis is treated by excision and microdochectomy for duct ectasia.

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