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RESEARCH ARTICLE

CLINICAL PROFILE OF BENIGN BREAST DISEASES AND MANAGEMENT- A HOSPITAL BASED STUDY

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Abstract

Background: Benign breast disease is the most common cause of breast problems. The aim of the study is to look at the different types, age distribution, modes of presentation of the various benign breast diseases and management.

Methods: A hospital based cross sectional study was carried out in 50 female patients presenting with benign breast diseases to the Department of General Surgery, Jorhat Medical College & Hospital from May 2021 to April 2022. After detailed clinical history they were subjected to clinical examination and investigations and they were managed accordingly.

Results: The most common benign breast disease encountered in this study was fibroadenoma (62%) followed by fibrocystic disease (18%) mainly occurring in the 3rd (52%) and 2nd (34%) decade of life. All the cases presented with lump in the breast and 98% of the affected female were in pre-menopausal period. Out of the 50 cases, 36 patients were treated surgically.

Conclusion: Benign breast diseases constitute the majority of breast complains and it has psychological impact on the patients. The biggest fear of such lump is turning out to be malignant. Appropriate evaluation is needed so that patients are not unduly alarmed and reassured.

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Introduction:-

Benign breast diseases encompass a very wide range of clinical and pathologic entities. Therefore surgeons require an in depth understanding of benign breast diseases so that clear explanations may be given to affected women, appropriate treatment instituted and unnecessary long term follow up avoided.⁽¹⁾ The breast is a dynamic structure that undergoes changes throughout a woman's reproductive life, and superimposed upon this, cyclical changes takes place in the menstrual cycle. The pathogenesis involves disturbances in the breast physiology extending from a perturbation of normality to well defined disease process of the breast.⁽²⁾ The nomenclature of benign breast disease is confusing. To overcome this confusion, a concept (Aberrations of Normal Development and Involution - ANDI) has been developed and described by the Cardiff Breast Clinic. The most common presenting symptoms of benign breast diseases are pain, lumpiness or lump. The aim of treatment is to exclude malignancy and, once this has been done, to treat remaining symptoms. In this clinical study, all the possible attempts are made to study the various aspects, presentation and management of the benign breast diseases.

Aims And Objectives:-

To study the various types, age distribution and modes of presentation of different benign breast diseases along with management for different types of benign breast diseases.

Materials And Methods:-

This hospital based cross-sectional study comprised of 50 female patients attending the Surgery Out Patient Department or admitted in the various surgical units of Jorhat Medical College and Hospital, Jorhat during the period from May 2021 to April 2022.

This clinical study included all the female patients with benign breast diseases. Females below 12 years and above 60 years and with history of any malignant diseases diagnosed before or during the course of the study were excluded.

Detailed history was taken regarding breast lump, breast pain and nipple discharge and after that patients were subjected to thorough physical examination and relevant investigations. Consent was taken from the parents in case of minors for the inclusion in the study. Depending on the reports, patients were managed accordingly either conservative or with surgical management.

All the data was compiled and analysed using proper statistical techniques. The data was tabulated on Microsoft Excel and analyzed with relevant tables and bar or pie diagram and the results were discussed with relevant literature to arrive at the conclusion.

Ethical clearance was obtained from the Institutional Ethics Committee of Jorhat Medical College and Hospital.

Results And Observations:-

In the present study, the most common benign breast disease was fibroadenoma (62%) followed by fibrocystic disease (18%). Majority of the benign breast diseases occurred in the 3rd (52%) and 2nd (34%) decade of life and almost all the cases (98%) affecting the pre menopausal women. All the cases presented with lump frequently involving the upper outer quadrant of the breast (40.79%). 94% of the cases had symptoms of less than one year duration and out of 50 cases, 36 cases were treated surgically.

Table 1:- Types of Benign Breast Diseases.

Lesion	Number of cases	Percentage (%)
Fibroadenoma	31	62
Fibrocystic Disease	9	18
Breast Abscess	4	8
Benign Cystosarcoma Phyllodes	3	6
Tuberculosis of Breast	2	4
Sebaceous Cyst	1	2
Total	50	100.00

Table 2:- Age distribution of Benign Breast Diseases.

Lesions	Age (in years)				
	12-20	21-30	31-40	41-50	>50
Fibroadenoma	12	15	4	0	0
Fibrocystic Disease	3	5	1	0	0
Breast abscess	1	3	0	0	0
Benign Cystosarcoma Phyllodes	1	2	0	0	0
Tuberculosis of Breast	0	1	1	0	0
Sebaceous cyst	0	0	0	1	0

Total (n=50)	17	26	6	1	0
Percentage (%)	34	52	12	2	0

Figure 1:- Relation of parity to Benign Breast Disease.

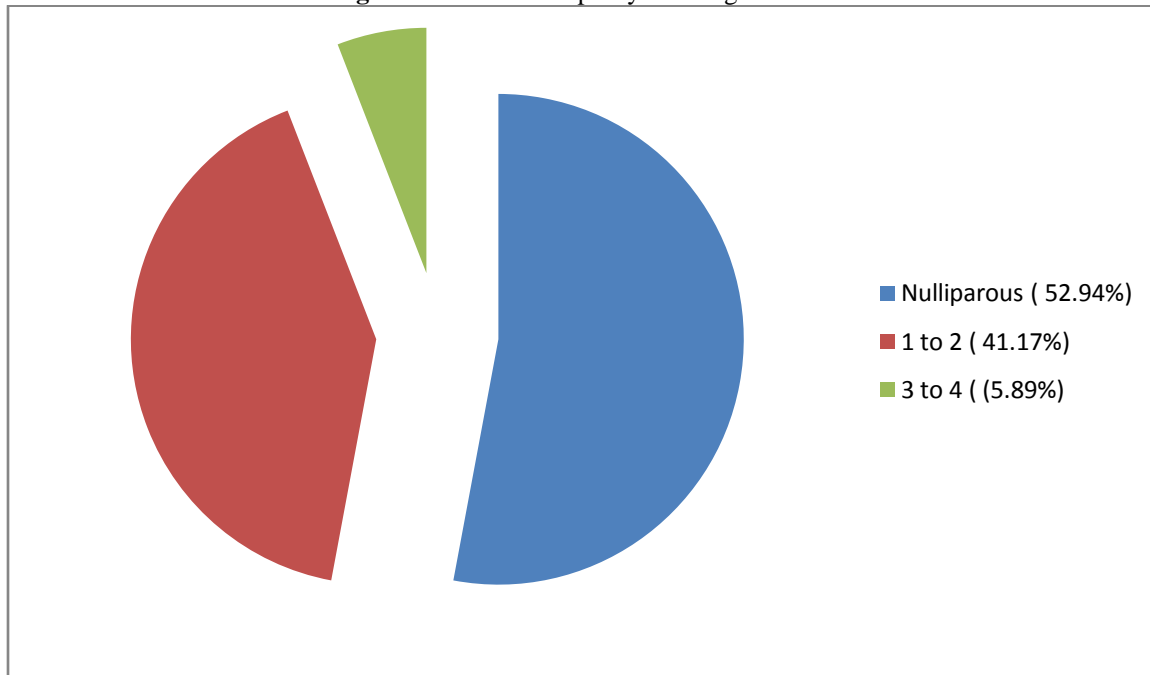


Table 3:- Mode of presentation in the patients with Benign Breast Diseases.

Symptoms	Number of cases (n=50)	Percentage (%)
Lump	34	68
Lump+ Pain	12	24
Lump + Pain + Fever	4	8
Total	50	100

Table 4:- Quadrants wise distribution of lump.

QUADRANTS	NUMBER OF LUMP IN THE STUDY GROUP (n=76)	PERCENTAGE (%)
Upper Outer	31	40.79
Upper Inner	17	22.39
Lower Outer	10	13.16
Lower Inner	14	18.41
Central	1	1.30
All	3	3.95

Table 5:- Surgical management.

SURGICAL MANAGEMENT	NUMBER OF CASES	PERCENTAGE(%)
Local Excision	29	80.55
Wide Excision	2	5.56
Simple Mastectomy	1	2.78
Incision & Drainage	4	11.11
Total	36	100.00

Discussion:-

This clinical study consists of 50 cases of Benign Breast Diseases studied for 1 year and a sincere effort is made to correlate its results and observation with other published data.

Table 6:- Relative incidence of Benign Breast Diseases in various reported series (in percentage).

AUTHOR & YEAR	GROUP SIZE	FIBROADENOMA	FIBROCYSTIC DISEASE	BREAST ABSCESS	BENIGN CYSTOSARCOMA PHYILLODES
Abhijit MG et al (2013) ⁽³⁾	n=110	56.4	20.9	8.1	-
Sashikala V et al (2016) ⁽⁴⁾	n=100	37	23	7	4.0
Selvakumaran et al (2017) ⁽⁵⁾	n=168	55.9	20.8	5.9	2.3
Bhakti Dubey et al (2019) ⁽⁶⁾	n=203	54.2	14.3	4.9	2.0
Present series (2022)	n=50	62	18	8	6.0

Fibroadenoma followed by fibrocystic disease were the most common benign disorder encountered in this study which is as per the other studies mentioned above. 2 cases (4%) of tuberculosis of breast was found which is almost comparable with the study by Shukla et al (1983)⁽⁷⁾ which was 5.21% among 927 patients. A single case of sebaceous cyst was found occurrence of which is similar to the study conducted by Sashikala V et al (2016)⁽⁴⁾ where they encountered 2 cases out of 100 cases.

The most common age group affected were between 21-30 years (52%), which corresponds to study conducted by Khandaza et al (2009)⁽⁸⁾ and Abhijit MG et al (2013)⁽³⁾ where the percentage were 40.06 and 60 % respectively.

In this study, 98% of our patients were in pre-menopausal period which was comparable with the study by Naveen et al (2013)⁽⁹⁾ where 94% were pre-menopausal. 17 out of 50 cases (34%) were married, of whom 9 cases (52.94%) were nulliparous and 8 cases (47.06%) had experienced pregnancy. This is comparable with study by Decholnoky et al⁽¹⁰⁾ which had 27.5% patients who experienced pregnancy and 63% were nulliparous.

All the cases presented with lump in our study. In the other studies by Sangma et al (2013)⁽¹¹⁾ and Selvakumaran et al (2017)⁽⁵⁾ it was found that lump was the most frequently occurring complaint.

Upper outer quadrant of the breast was the commonest site of distribution of lump (40.79%) when compared to the other quadrants of the breast. This finding was almost similar to that of the studies done by OA Egwuonwu et al (2009)⁽¹²⁾ and Selvakumaran et al (2017).⁽⁵⁾

In this study of 50 cases, 9 cases of fibrocystic disease managed conservatively with capsule of evening primrose oil, vitamin E capsules and analgesics. 2 cases of tuberculosis of breast treated with anti tubercular therapy under DOTS. 3 cases of fibroadenoma were treated conservatively due to very small size (0.5-1 cm). Surgical intervention was carried out in 36 cases out of 50 cases.

Conclusion:-

The present study of benign breast disease in a teaching hospital revealed that benign breast diseases occupy majority of total breast diseases. Fibroadenoma is the commonest entity encountered followed by fibrocystic disease and vast majority presents in second to fourth decade of life affecting mostly premenopausal women. Fibrocystic disease and tuberculosis of breast responded to conservative treatment. Surgery in the form of excision will suffice in majority of the cases.

In a developing country like India, proper education regarding self breast examination including awareness campaign of various breast problems is highly recommended so that the affected women specially from rural background do not hesitate for their early treatment. Affected women are to be reassured first followed by proper evaluation, treatment and follow up.

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Nil.

Conflicts of interest –

None.

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