

Research Article

A clinico-pathological study of benign breast diseases in rural population

Narayan Das*, Amarendra Debbarma, Gautam Debbarma

Department of Surgery, Agartala Government Medical College & G B P Hospital, Agartala-799006, Tripura (West), India

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*Correspondence:

Dr. Narayan Das,

E-mail: narayandas9862019118@gmail.com

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ABSTRACT

Background: Objective of current study was to study the pattern of benign breast diseases in females in our society.

Methods: One hundred females who were treated in the department of surgery at Agartala government medical college & G B P Hospital, Agartala, Tripura (West) with various forms of benign breast diseases during the period from January 2013 to December 2013, were studied. Diagnosis were made by a combination of clinical assessment, radiological imaging and tissue biopsy so - called triple assessment.

Results: The commonest presentation of benign breast diseases was breast lump followed by nodularity of breast. Fibroadnomas are the commonest benign breast disease and fibrocystic changes form the second most common lesion. The common age group of benign breast diseases range from 21 years to 40 years. This might be associated with certain environmental, regional, dietary or hormonal factors.

Conclusion: The result of this study showed that benign breast diseases in females of our society are fibroadenomas followed by fibrocystic diseases. The actual factors responsible for this change needs further research and study.

Keywords: Breast, Benign breast diseases

INTRODUCTION

Benign Breast Diseases (BBDs) is one of the most common disease in the females of any society. It is a group of breast diseases which is not cancer.¹

It is at least 10 times more common than breast cancer in the West.²

The objective of this study was to find out the pattern of benign breast diseases in females in our society.

Benign breast diseases are the most common cause of breast problems; up to 30% of women will suffer from a benign breast disorder requiring treatment at sometimes in their lives. The most common symptoms are breast pain, lumpiness or a lump. The aim of treatment is to

exclude cancer, and once this has been done, to treat any remaining symptoms. The nomenclature of benign breast diseases is very confusing. A new system [Aberrations of Normal Development and Involution (ANDI)] has been described by the Cardiff breast clinic, in Wales - a famous centre for the study of breast disease under the professorships of Leslie Ernest Hughes and Robert Edward Mansel.³

METHODS

This study was conducted at Agartala government medical college & G B P hospital, Agartala from January 2013 to December 2013.

The one hundred women were treated for benign breast diseases were included in this study.

Inclusion criteria

Female patients with any benign diseases of the breast- for example a breast lump, breast pain or a nipple discharge were included in this study.

Exclusion criteria

Women with any obvious malignant diseases or those who had been treated for malignancy earlier or operated were excluded in this study.

A detailed history of all one hundred cases was taken according to a detailed proforma. Diagnosis was made by a combination of clinical assessment, radiological imaging and tissue sample taken for either cytological or histological analysis, the so-called triple assessment.

RESULTS

This study included a total of one hundred cases that were studied prospectively in the department of surgery of Agartala government medical college & G B P hospital, Agartala.

Modes of presentation and their incidence

The patients were broadly divided into four groups, depending on the symptoms or presentation such as a breast lump, Nodularity, breast pain and a nipple discharge.

The commonest presentation was breast lump which comprised 69 (69%) cases followed by nodularity of the breast (17%) and breast pain (13%).

The Table 1 elaborates in further.

Table 1: Modes of presentation and incidence of benign breast diseases.

Presentation	No. of patients	Percentage
Breast lump	69	69%
Nodularity of breast	17	17%
Breast pain	13	13%
Nipple discharge	1	1%
Total	100	100%

Age-wise distribution and their incidence of benign breast diseases

The age distribution of the of benign breast diseases is shown in Table 2.

The age of the patient with benign breast diseases ranged from 12 years to 58 years. The majority of the patients are in the age group 21 years to 40 years.

Table 2: Age-wise distribution of benign breast diseases.

Diagnosis	Age (year) 11-20	Age (year) 21-30	Age (year) 31-40	Age (year) 41-50	Age (year) 51-60
Fibroadenoma	4	26	20	2	2
Fibroadenosis	3	4	10	0	0
Mastalgia	0	8	5	0	0
Breast abscess	1	2	2	0	0
Phyllodes tumour	0	0	2	2	0
Galactocele	0	1	1	0	0
Antibioma	0	2	2	0	0
Simple Cyst	1	1	0	0	0
Duct papilloma	0	1	0	0	0
Total	9	45	40	4	2
Percentage	9%	45%	40%	4%	2%

Types and incidence of benign breast diseases

Fibroadenomas are the commonest benign breast diseases constitute 54% of the total. Fibrocystic changes (Fibroadenosis) form the second most common lesions consisting 17% of benign breast diseases. Mastalgia is also a common breast problem (13%). The incidence of different types of benign breast diseases shown in Table 3.

Table 3: Incidence of different type of benign breast diseases.

Diagnosis	No. of patients	Percentage
Fibroadenoma	54	54%
Fibroadenosis	17	17%
Mastalgia	13	13%
Breast abscess	5	5%
Phyllodes tumour	4	4%
Galactocele	2	2%
Antibioma	2	2%
Simple cyst	2	2%
Nipple discharge-duct papilloma	1	1%
Total	100	100%

DISCUSSION

Benign breast diseases include a heterogenous group of condition which range from normal, to aberrations in the physiology, to frank diseases. The patients of benign breast diseases generally present with one or more of those complaints-breast lump, breast pain or nipple discharge, but due to lack of education and awareness females ignore the lump. It has been recommended that all the patients with discrete breast lumps should undergo a triple assessment to make an early diagnosis.⁴ Fibroadenomas are the common benign breast diseases in

our society and patients want to get it removed because of fear of malignancy or due to cosmetic reasons. Fibroadenomas accounted for 54% of benign breast diseases in this study. The peak incidence of fibroadenoma ranged from the 2nd to the 3rd decade of life which was consistent with the findings of other studies. Fibroadenomas usually present as solitary, firm, rubbery and non-tender lumps. FNAC was the quickest and the most reliable method which helped in making the diagnosis of benign breast diseases. Our finding was in agreement with most of the available literature on benign breast diseases, where the frequency of fibroadenoma ranged from 46.6-55.6.⁵

Interestingly it is noticed that the prevalence of fibrocystic disease and fibroadenoma of breast is quite variable in every society. In this study the patients suffering from fibrocystic disease was 17%. This percentage is lower than other studies conducted as Jamal et al. from Saudi Arabia 36%,⁶ 29.2% by Thakwaba from Nigeria,⁷ 42% in Nigeria by Adesunkanmi⁸ and 25.5% to the study conducted by Chaudhuri et al. from India.⁹

The result of this study supports the existing evidence that in our society, fibroadenomas are the commonest benign breast disease followed by fibrocystic disease. This might be associated with certain environmental, regional, dietary or hormonal factors which needs further research and evaluation.

CONCLUSION

Benign breast diseases are one of the most common diseases in the females of our society. A lump in the breast is the commonest presentation. Breast pain, nodularity and nipple discharge are the other symptoms. The result of this study showed that benign breast diseases in females of our society are fibroadenomas followed by fibrocystic changes. The actual factors responsible for this change needs further research and study.

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Conflict of interest: None declared

Ethical approval: The study was approved by the institutional ethics committee

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