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General Surgery

Clinical Evaluation of Breast Lump

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Abstract: This prospective and descriptive study was conducted at the department of General Surgery at Kamineni academy of medical sciences and research centre, L.B Nagar, Hyderabad. A total 100 patients with different breast lesions were included in this study. Patient was evaluated with different diagnostic modalities like clinical diagnosis, mammography, ultra-sonogram, fine needle aspiration cytology and histopathology. In our study out of 100 cases studied, Fibroadenoma (52%), Fibrocystic disease (11%), carcinoma breast (11%) fibroadenosis (8%), breast abscess(5%), lipoma (3%), Antibioma (3%)Phylloides Tumour(2%), Breast tuberculosis (2%),fat necrosis and Duct Ectasia (1%) were observed. The maximum effected age group is between 20-29 years (42%) followed by 30-39 years (31%). In our study Superolateral quadrant (56%) was the commonest site of occurrence of these lumps. Next was superomedial (17%), inferomedial (15%), inferolateral (12%), and periareolar (10%). Nulliparous (including unmarried) were most commonly affected group (62%), next was primipara (30%) followed by multipara (8%). The most commonly observed symptom was lump in the breast (37%) followed by pain in breast (26%). The histopathological studies give accurate diagnosis of the lesion along with other techniques.
Keywords: Breast lump, fibro adenoma, diagnostic techniques, breast cancer.

INTRODUCTION

Breast lesions can be of various types from inflammatory to benign to malignant. Some lesions are common in young females while others are more common in elderly age group. Benign breast diseases are common during the reproductive life. These diseases are more common than the breast cancer. The most common symptoms are lump and pain, the main concern of the patient being if the lump is a malignancy. It is immensely important to detect breast disease as early as possible. One must have a proper knowledge of gradual evolution of breast tissue and benign breast disease presenting as lump. Most of the women who suffer from benign breast disease will require treatment at some time in their lives.

Breast masses especially in young age group are a source of anxiety for the patients and surgeons because of risk of the cancer and the potential cosmetic disfigurement following surgery. Hence recognizing them is important from the viewpoints of therapy and prognosis [1]. In India breast cancer forms the commonest malignancy after cervical cancer in females and is detected in 20 per 1,00,000 women. However there are more benign breast lesions than the malignant breast lesions [2]. Breast lump is the most common reason for presenting to surgery department. The aim of this study is to find the prevalence, evaluate the breast lump with different investigative procedures.

MATERIALS & METHODS

This study was conducted at Kamineni Academy of Medical Sciences and Research Centre, Hyderabad from January 2015 to December 2017 after obtaining permission from hospital ethics committee. Patients suffering with breast pain and lump coming to general surgery department out -patient department were included in this study. Information on age at presentation, parity, duration of symptom before presentation, mode of discovery of lump, previous breast disease, side and quadrant of breast affected were noticed. These were sequentially studied by clinical

radiological methods, fine needle aspiration cytology, Ultra sonogram and histopathology of removed specimen. Final diagnosis was done co-relating the clinical diagnosis with investigation. After taking proper history and thorough clinical examination investigative procedures such as Fine Needle Aspiration Cytology, mammography, Breast Ultrasonography, histopathology examination of biopsy specimen were done.

RESULTS

This study includes 100 patients aged between 15-60 years female with breast lump and pain like symptoms. The youngest affected is a 15yr old female and the oldest female is 59yrs. The maximum effected age group is between 20-29 years followed by 30-39 years.

The symptoms like lump (37%) was observed in most of cases, but some of patients showed other symptoms shown in table 2.

Table-1: Age wise distribution

Age in years	No of cases or (%)
<20	18
20-29	42
30-39	31
40-49	6
50-59	3

Table-2: Symptom noticed in patients

Symptom	No of cases or (%)
Lump	37
Pain	26
Lump and pain	18
Fever, pain and swelling	6
Nipple discharge	7
Nipple discharge and pain	5

Table-3: Side affected and parity of patients

Side	No (%)	Parity	No (%)
Left	47	Nulliparous	62
Right	49	Primiparous	30
Bilateral	4	Multiparous	8

Table-4: Site /location involved

Site	No or(%) effected
Superolateral	56
Superomedial	17
Inferomedial	15
Inferolateral	12
Perialveolar	10

Table-4: Histopathology of breast lesions

Histopathology	No (%) effected.
Fibroadenoma	52
Fibroadenosis	8
Fibrocystic disease	11
Phylloides Tumour	2
Carcinoma Breast	11
Duct Ectasia	1
Lipoma	3
Antibioma	3
Breast abscess	5
Breast TB	2
Fat necrosis	2

Table-5: Diagnostic accuracy with different investigative procedures

Disease	Histo pathology	Clinical diagnosis		Mammography		FNAC		USG	
		clinical	Accurate %	clinical	Accurate %	clinical	Accurate %	clinical	Accurate %
Fibroadenoma	52	50	96.15	50	96.15	51	98.07	47	90.38
Fibroadenosis	8	5	62.5	6	75	7	87.5	7	87.5
Fibrocystic disease	11	8	72.72	7	63.63	10	90.9	11	100
Phylloides Tumour	2	2	100	2	100	1	50	2	100
Carcinoma Breast	11	9	81.18	10	90.9	10	90.9	10	90.9
Duct Ectasia	1	1	100	0	0	1	100	1	100
Lipoma	3	1	100	0	0	3	100	2	100
Antibioma	3	0	0	0	0	0	0	2	100
Breast abscess	5	3	60	0	0	4	80	5	100
Breast TB	2	0	0	0	0	2	100	2	100
Fat necrosis	2	0	0	0	0	1	50	1	50

DISCUSSION

The mammary gland is a unique organ in that it is not fully formed at birth and undergoes cyclical changes during reproductive life. Some of the breast diseases occur during reproductive life while some occur during menopausal period indicating relation of these diseases to hormonal stimulation as a causative factor [3]. Benign lesions of breast are the most common lesions which account for 90% of the clinical presentation related to breast [4]. Of all breast disorders, palpable breast lump is second most common presentation, the pain being the first [5]. The consequences of breast lumps besidescreating anxiety result into carcinoma and cause unbearable pain and deformity [6].

In our study out of 100 cases studied, Fibroadenoma(52%), Fibrocystic disease (11%), carcinoma breast (11%) fibroadenosis (8%), breast abscess(5%), lipoma (3%), Antibioma (3%)Phylloides Tumour(2%), Breast tuberculosis (2%), fat necrosis and Duct Ectasia (1%) were observed. Jain et al [7] observed out ofthe 100 cases analysed, 74% were benign, 20% malignant and the remaining 6% were inflammatory. Anindita Bhar et al [8] noticed 79% of the benign breast lumps were found to be between 10–35 years, Fibro adenoma being the commonest one (41.38%) and fibrocystic disease the second most common (29.31%). Breast lump were more common among unmarried and nulliparous females (48.27%), commonest site being upper and outer quadrant (38.8%). 69% patients were associated with an abnormal menstrual status. 76% of the cases were accurately diagnosed by clinical examination, 70% by mammography, 88% by FNAC and 84% by ultrasonography.

In a study done by Priya Bagale *et al*. [3], out of 489 breast lesions studied, 105 were malignant cases and 384 were benign breast lesions. These benign breast lesions including inflammatory lesions, benign proliferative lesions and benign tumours. Maximum age of incidence was particularly noted in the age group of 21-40 years. Amongst all benign breast lesions fibroadenoma was commonest lesion followed by fibrocystic change, sclerosing adenosis, breast abscess, Granulomatous lobular mastitis, mammary duct ectasia, blunt duct adenosis, fat necrosis and gynecomastia in descending order of frequency.

Malik *et al*. [9] studied total of 954 cases of breast diseases, in which benign breast disease cases were 683 whereas malignant cases were 271. Among all the benign breast lesions, fibroadenoma was the commonest (57.8), followed by breast abscess, fibrocystic disease and gynecomastia in decreasing order of frequency.

In our study 11% of patients suffering with breast carcinoma, observes in older age people Breast cancer is the most common non-cutaneous neoplasia in women. It is a heterogeneous disease, such that it may have different prognostic and therapeutic responses despite similarities in histological types, grade and stage of various subtypes. The mean age for breast cancer in our study noticed at 45.72 years [10].

In our study peak incidence is in 2nd and 3rd decade of life, but can also occur after menopause due to hormone replacement therapy. These findings were consistent with other studies [11,12]. In our study Superolateral quadrant (56%) was the commonest site of occurrence of these lumps. Next was superomedial (17%), inferomedial (15%), inferolateral (12%), and periareolar (10%). Nulliparous (including unmarried) were most commonly affected group (62%), next was primipara (30%) followed by multipara (8%). These results were in comparison with others [3].

In these study 2 cases of breast tuberculosis was found. This correlates with findings of Bailey and Love [13, 14]. The different diagnostic modalties for breast pathologies are through clinical examination, USG, mammography, FNAC and histopathology. The

initial provisional diagnosis must always be confirmed by histopathology. By a single method it is not always possible to diagnose a solid or a cystic lesion or a benign from a malignant lesion [8].

CONCLUSION

This study concludes that benign breast lump condition is most commonly noticed in reproductive age females. Fibro adenoma is most commonly occurring form of lump. Breast cancer is also observed in elderly patients. Right side of breast is mostly affected and nulliparous females are mostly affected.

REFERENCES

1. Khanna R, Khanna S, Chaturvedi S, Arya NC. Spectrum of Breast Disease in Young Females: A Retrospective Study of 1315 Patients. Indian J. Pathol. Microbiol. 1998; 41(4):397-401.
2. Kulkarni S, Vora IM, Ghorpade KG, Srivastava S. Histopathological Spectrum of Breast Lesions with Reference to uncommon cases. J Obstet Gynecol India. 2009;59(5):444-52.
3. Bagale P, Dravid NV, Bagale S, Ahire N. Clinicopathological Study of Benign Breast diseases. International Journal of Health Sciences & Reseach. 2013;3(2):47-54
4. Muritto Ortiz, B. Botello, D. Harnandez and Ramirez Mateos, 2002. C Reypaga Garieia. BBD Clinical, radiological and pathological correlation. Gynecol.Obstet. Mex., 70: 613-618.
5. Kumar, A., L.S. Vohra, K. Bhargava and P.S. Reddy, 1999. Investigation of Breast lump An evaluation. MJAFI.,55: 299-302
6. Vaidyanathan, L., K. Barnard and D.M. Elnicki, 2002. Benign breast disease,When to treat, when to reassure, when to refer. Cleve. Clin. J. Med.,69: 425-432.
7. Savita Bharat Jain, Isha Jain, Jyoti Shrivastav and Bharat Jain. A Clinicopathological study of breast lumps in patients presenting in SurgeryOPD in a referral hospital in Madhya Pradesh, India. Int.J.Curr.Microbiol.App.Sci (2015) 4(8): 919-923.
8. Anindita Bhar, Sagar Karmakar, Suman Mukherjee. Clinico pathological study of benign breast lump – a hospital based study**,** J. Evid. Based Med. Healthc., Vol. 3/Issue 23/Mar. 21, 2016 pp 2349-2562.
9. Malik MAN, Salahuddin O, Azhar M, Dilawar O, Irshad H, Sadia, Salahuddin A. Breast Diseases; Spectrum in Wah Cantt; POF Hospital Experience. Professional Med J Sep 2010; 17(3):366-72.
10. Anyanwu SNC.Temporal trends in breast cancer presentation in the third world. J Exp Clin CancerRes. 2008; 27(1): 17
11. Masciadri N, Ferranti C: Benign breast lesions: ultrasound. J Ultrasound 2011, 14(2):55–65.
12. Hafiz Muhammad Aslam, Shafaq Saleem, Hiba Arshad Shaikh, Nazish Shahid, Anum Mughal and Ribak Umah. Clinico- pathological profile of patients with breast diseases. Diagnostic Pathology 2013, 8:77.
13. Bailey & Love's. Short Practice of Surgery 2004;24th Ed: pp:1376.
14. Shinde SR, Chandawarkar RY, Deshmukh SP. Tuberculosis of breast masquerading as carcinoma: a study of 100 patients. World J Surg 1995;19(3):379-381.