



The Role of Radio-Imaging in Screening High Risk Patients of Breast Cancer

KEYWORDS

breast lesions, FNAC, mammogram

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ABSTRACT With the increasing awareness of breast cancer, most women routinely do a self breast examination. Most of the breast lesions detected are benign ones and they simply cause a panic among the people .FNAC is routinely used to characterize these lesions is an invasive procedure. Mammogram is a non invasive technique and can give resuts similar to FNAC in diagnosing the breast lesions. In view of the above we studied the role of mammo-gram screening high risk patients of breast cancer

Materials and methods : This study was done on 53 patients who were high risk candidates for breast cancer.These patients underwent mammography and if a lesion was found it was radiologically divided into benign and malignant le- sions and the findings were co – related with FNAC findings.

Results and observations : In our study,out of 53 cases who underwent screening mammography , lesions were seen in 24 cases of which 4 were malignant and 20 were benign.

Conclusion : In our study we found that screening mammography though detects lesions they have to be evaluated by FNAC

Introduction

With the increasing awareness of breast cancer, most women routinely do a self breast examination. Most of the breast lesions detected are benign ones and they simply cause a panic among the people .FNAC is routinely used to characterize these lesions is an invasive procedure. Mammogram is a non invasive technique and can give results similar to FNAC in diagnosing the breast lesions.

Benign Breast Diseases accounts for the most common cause of breast problems in modern day practices. Upto 30% of women will suffer from a Benign Breast Diseases requiring treatment at some time or other in their lives. The important aspect is to differentiate a Benign Breast Diseases from a malignant lesion. It is under these circumstances that Benign Breast Diseases assumes significance

In view of the above we studied the role of mammogram screening high risk patients of breast cancer

Materials and methods

This study was done on 53 patients who were high risk candidates for breast cancer.These patients underwent mammography and if a lesion was found it was radiologi- cally divided into benign and malignant lesions and the findings were co – related with FNAC findings.

Inclusion criteria

- Patients between 35 years to 75 years
- Patients consenting for study
- Patients with strong family history
- Patient with history of cancer in one breast were screened for malignancy in the opposite breast

Exclusion criteria

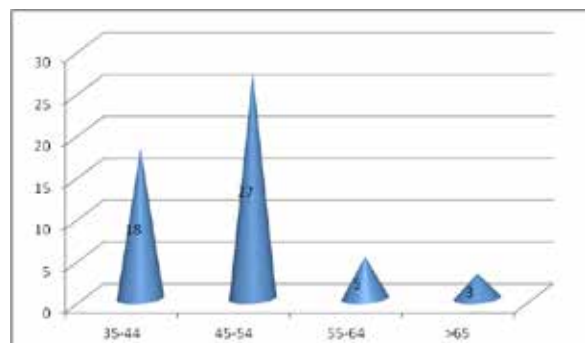
- Patients undergone prior breast surgeries or biopsies

in the same breast

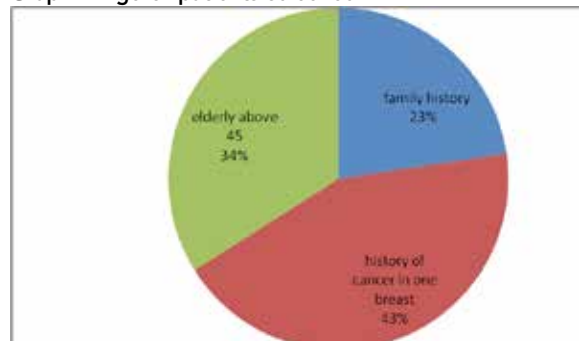
- Patients referred with a pathologically known diagnosis

Results and observations

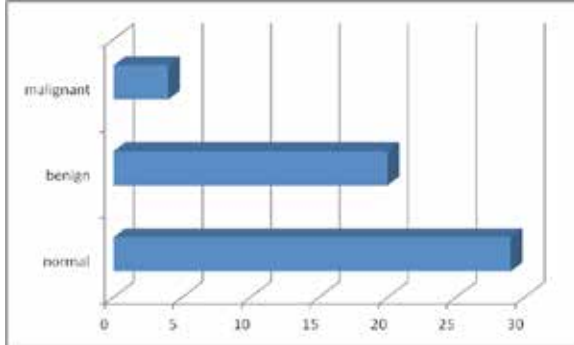
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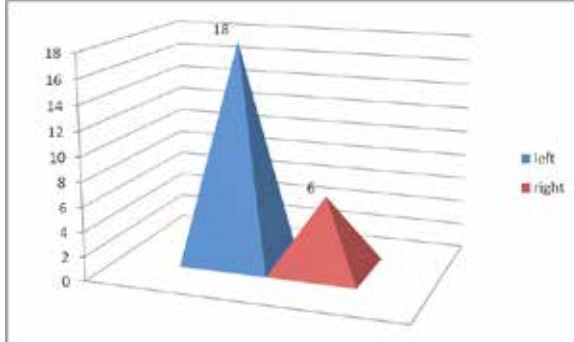
Graph 1 Age of patients screened



Graph 2 : Indications For Mammography



Graph 3 : Final Diagnosis



Graph 4 :Side of lesion

Discussion

The increase in the literacy and awareness among women especially about breast pathologies breast lump is now started to be one of the commonest presentations in out-patient departments. Clinical examination in most patients has to be confirmed under the microscope. The pioneering work at the Karolinska institute in Stockholm by Torsten Lowhagen and his colleagues, in the 60s and 70s helped to popularize a new minimally invasive technique of diagnosis known as Fine-Needle Aspiration Cytology (FNAC).

With the introduction of FNAC which has proved to be an important asset in evaluation of breast lesions with a high degree of accuracy, sensitivity, and specificity.¹

Fine needle aspiration cytology gave highest predictive value [97.3%] with a sensitivity of 93.5% and a specificity of 98.1%. Lopez-Ferrer reported a 79.3% predictive value out of 362 fibroadenoma aspirates with most diagnostic errors occurring in the older age group²

FNAC proved to be a useful and reliable tool in the evaluation of masses in the breast.

The use of non invasive diagnostic procedures such as FNAC and ultrasound can reduce need for open surgery³ The difference in the sensitivity of FHCB and FNAC was statistically significant ($P < 0.005$, Wilcoxon matched pair test). Since 94.8% of radiologically-suspicious lumps were shown to be cancers, we advocate FHCB for all patients presenting with radiologically suspicious palpable lumps⁴

Hussain et al in their study showed that left side lesions (54%) are more common in the breast which are similar to our study⁵

Though mammography is useful way of screening high risk individuals it has its own benefits and harms.

In a study by Archie Bleyer et al⁷ it was shown that the imbalance suggests that there is substantial overdiagnosis, accounting for nearly a third of all newly diagnosed breast cancers, and that screening is having, at best, only a small effect on the rate of death from breast cancer.

Conclusion

In our study we found that screening mammography though detects lesions they have to be evaluated by FNAC

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