ORIGINAL RESEARCH PAPER

General Surgery

BREAST ABSCESS IN NON NURSING WOMEN

KEY WORDS: Breast Abscess, Non Nursing Women, Mastitis,,Diabetes.

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ABSTRACT

Background: Non Nursing Breast Abscess is formation of pus in Breast resulting from an infection in not pregnant or breastfeeding women. Incidence of such Abscess in non nursing women is although less but rising. These are either in nipple areolar region or peripheral in breast..Aim of this study is to explore the cause of Abscess,Early diagnosis, identification of organisms & sensitivity to antibiotics & to assess treatment modality. **Methods:** Observational Study **Results:** Breast Abscess In 30 non nursing Patients of age group 28-55 yrs,developed due to Diabetes in 18 (60%), Mastitis in 6 (20%),Trauma in 3 (10%),Duct ectasia 1 (3.3%),Cacinoma 2 (6.6%) .Most frequent organism seen was Staphylococcus Aureus,but Streptococcus & Pseudomonas also isolated.Early Diagnosis was possible by Ultrasound. Incision & Drainge under Anaesthesia in 20 (66.6%) with antibiotics & treating underlying disease.Antibiotics with Percutaneous Aspiration in 5 (16.6%) and only Antibiotics in 3 (10%) Patients required. **Conclusions:** Breast Abscess in Non Nursing Women is infrequent entity in comparison to that in Nursing Women,Early Diagnosis is possible by Ultrasound examination.Incision & drainage mostly required but Percutaneous Aspiration is also helpful.02 Patients (6.6%).with cancer didnot improve.

INTRODUCTION:

Breast Abscess in non nursing women results from inflammation of breast leading to an infection and abscess formation on underlying disease of Diabetes, Mastitis, Trauma, Benign & Malignant Lesions of Breast in age group 28-55Yrs. This is attributed to increase activity of breast to female hormones resulting into superficial mastitis to deep Abscess either in sub nipple areolar area or in periphery in breast parenchyma. Treatment ranges from organism sensitive antibiotics, may requring simple aspiration to incision and drainage of breast to evacuate pus but if not done properly may result in formation of Antibioma which mimics malignancy clinically and radiologically. Peripheral breast abscess is associated with diabetes, trauma, infection of breast skin, sweat glands or breast tissue with lactational glands as hidradenitis or acne.Sub areolar abscess result from changes in terminal lactiferous duct as metaplasia leading plugging & obstruction of ducts.The most frequent organism seen are staphylococcus Aureus,streptococcus and pseudomonas.

MATERIAL & METHODS

In this study 30 Non nursing Patients of age group 28-55,between years 2020 to 2022 at NDMC Medical College & Hindu Rao Hospital were included. Their Medical history, Operative Notes, Histopathology, Culture & Sensitivity Reports and Response to Therapy were reviewed. All organism isolated were grown on culture and drug sensitivity test against Antibiotics as Ampicillin, Co Amoxiclav, Cefixime, Cefopodoxim, Cefuroxime, Gentamycin, Ciprofloxacillin, Amikacin, Clindamycin & Metronidazole done. Treatment either by only sensitive Antibiotics or Percutneous Aspiration of pus or with Incision & Drainage of Pus under Anaesthesia done.

RESULTS

In this study of 30 Breast Abscess Patients of Age Group 28- 55 Yrs in Non Nursing Women,only 2 patients (6.6%) of age below 35,26 patients (86.6%) in age group 35-48 & 2 patients (6.6%) of age group 48-55 were seen.90% patients (27) were premenopausal and 10% patients (3) were post menopausal. Cause of infection leading to abscess formation was Diabetes in 18 (60%),Mastitis in 6 (20%),Trauma in 3 (10%),Ductal ectasia 1 (3.3%),Carcinoma 2 (6.6%).Organism isolated were Staphylococcus Aureus in 90% (27) patients, Streptococcus in 2 patients (6.6%) & Pseudomonas in 1 patient (3.3%)..Patients responded by Incision & Drainage under Anaesthesia with sensitive antibiotic in 20 (66.6%),Percutaneous Aspiration of pus with antibiotic in 5 (16.6%) and only antibiotic 3 (10%) Patients.24 patients (80%) responded with Amoxiclav,3 Patients (10%) required Cefuroxime,02 patients (6.6%) needed Inj Amikacin and 1 patient (3.3%) with clindamycin. 28 patients (90.3%) responded ,02 patients (6.6%) with cancer did not respond.

DISCUSSION

Breast Abscess in Non Nursing Women are an infrequent clinical entity occuring in women with underlying predisposing condition,mostly after age of 35 years.Due to delicate nature of Breast,prompt and adequate management of breast abscess is required by breaking all fibrous strata,draining all pockets of pus in loculae with packing with antibiotic gauze and gradually removing them in regular dressing to prevent Antibioma formation or chronic infection, periductal fistula and breast deformities. In these patients peripheral breast abscess is more common and is mostly seen in patient having diabetes, rheumatoid arthritis, steoid therapy, granulomatous lobar mastitis and trauma. Idiopathic granulomatous lobular mastitis present as recurrent breast abscesses Periductal mastitis causing periductal inflammation occur in subareolar area.

Periductal mastitis also common in smokers and those having discharge from nipple due to ductal ectasia,cracks and carcinoma.Breast Infection may sound simple but underlying ductal ectasia, carcinoma may present initially as breast abscess more in subareolar area but may also present as lobular mastitis in periphery. Latest fashion of nipple piercing,incidence of non lactating mastitis has increased as high as 10-20% in months following the procedure. The distinction between mastitis and frank abscess lies in their response as mastitis respond with antibiotics and aspirations while abscess require antibiotics with incision and drianage and if mastitis not treated by early diagnosis lead to breast abscess. Percutaneous drainage with irrigation by antibiotic solutions work good in acute abscess while chronic abscess are best treated with complete drainage. The Pattern of organism is different from those present in Nursing Women but far more sensitive to commonly used antimicrobial therapy. Most organisms were isolated on simple aerobic and non aerobic culture and responded with sensitive antibiotics except abscess with underlying malignant lesion.

STATISTICAL ANALYSIS

Incidence of Breast Abscess

Age Group	Cases	Percentage
28-35	02	6.6
36-48	26	80.6
48-55	02	6.6

Cause of Breast Abscess

Disease	Cases	Percentage
Diabetes	18	60
Mastitis	06	20
Trauma	03	10
Ductal Ectasia	01	3.3
Carcinoma	02	6.6

Treatment of Breast Abscess

Type	Cases	Percentage
Incision & Drainage	20	66.6
Aspiration	05	16.6
No Response	02	6.6
Antibiotic	03	10

CONCLUSIONS

1. Breast Abscess in Non Nursing Women is infrequent entity in comparison to that in Nursing Women but incidence is rising,
2. Early Diagnosis is possible by clinical & Ultrasound examination.
3. Incision & drainage mostly required but Percutaneous Aspiration is also helpful with antibiotics & treatment of underlying disease.
4. Ductal ectasia & carcinoma may present as Breast Abscess.
5. Abscess Associated with growth does not improve by above therapies.

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