OUTCOME OF INCISION DRAINAGE IN BREAST ABSCESS AMONG LACTATING MOTHERS.

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Abstract

Introduction: - In emergency surgery, abscess of Breast is the commonest mamary ailment influencing in lactating moms. Staphylococcus Aureus is found to be the common micro organism as a causative agent. Nursing mothers are prone to develop it. There is strong evidence that the women have first pregnancy commonly develop this condition in their 1st month of their lactational period. Trauma to mother's breast caused by baby at weaning at the age of 6 months is also the predisposing factor causing the abscess. Goal, ultrasound guided seepage and entry point wastes are the methods to be finished. **Design:** Study configuration is Cross sectional research. **Place with duration of study:-** Surgical division of Khairpur Medical College Hospital from September 2018 to August 2019 **Patients and methodology:-** All the patients with history of lactation were conceded through Surgical OPD and crisis Department of KMC Hospital Khairpur Sindh. History, neighborhood Examination separated from general physical, fundamental assessment was finished. Required biochemical just as imaging examinations were done trailed by various surgeries. **Results: -** Total 60 patients were included in this study. Incision drainage was done in most of patients. Culture and sensitivity of pus showed that the most common organism causing this condition was Staphylococcus.

Conclusion: - Incision drainage produced the excellent results with no recurrence rate.

Keywords:- Breast Abscess, lactation, Incision Drainage, Staphylococcus Aureus

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Introduction

The breast abscess is defined as the development of infection in the breast. It is commonly found in lactating females commonly between age 18 to 50 years. Though it is also found in non lactating females but it frequently occurs in nursing women.The prevalence of this disease ranges from 0.4% to 11% in breastfeeding women. [1] The micro organism gets entry into breast through nipples. The common organism involved is Staphylococcus Aureus. At first, infection involves the single segment then the infection progresses to other segment. Milk provides the culture medium for the enhancement of this condition. The stored milk in the involved segments speeds up the infection in breast.[2] Microbiologically, multiple organisms are involved in the development of the abscess. The commonest is Staphylococcus Aureus. A few cases of breast abscess involve multiple bacteria with isolation of aerobes and anaerobes.[3] Aerobes involved in causing it are staphylococcus, streptococci, Escherichia Choli and pseudomonas. Anaerobes found are bacteroides, Clostridium, peptostreptococci etc. Tuberculosis of breast also present as acute emergency in form of abscess. Typhoid also present in this form. HIV can also present as breast abscess initially but is rare.[4] The clinical features that a patient of breast abscess develop are painful swelling in one quadrant or more than one, fever, red and fluctuant lump, and sometimes enlarged axillary lymph nodes. These are diagnostic features of breast abscess clinically. The diagnosis is commonly clinical. The one thing that should be seen specially is that the lactational abscess commonly present peripherally. [5] Ultrasound of breast is largely helpful in the diagnosis of this disease. FNA is also done to diagnose and are helpful in treating the disease. Histopathology is sent for the confirmation and exclusion of tuberculosis or malignancies in such conditions. Mammography is somewhat supportive in diagnosis. [6,7] General treatment of this condition includes analgesics, breast support and emptying of breast by pump and antibiotics. Specific treatment involves pus aspiration, ultrasound guided needle aspiration/ catheter drainage and incision drainage. Ultrasound guided aspirations is also the treatment of choice of many surgeons who save the patients from surgery and maintains shape of the breast cosmetically. Of all, the common treatment option utilized by Surgeons in third world countries is Incision Drainage followed by multiple dressings. Though it is not good cosmetically but the recurrence rate is very rare in this procedure.[8]

The rationale of our study is detect the outcome of incision drainage in breast abscess in lactating mothers and find out the organism involved in causing this disease.

Methods:-

This is a cross sectional investigation of 60 patients, conceded at Surgical Department of Khairpur Medical College Hospital from September 2018 to August 2019. All the patients were conceded all through Patient Department (OPD) and crisis Department. They were experiencing full grown bosom abscesses. Point by point History and careful clinical assessment the two bosoms alongside reciprocal axillary lymph hubs was taken. The vast majority of the patients introduced having agonizing growing in right or left bosoms or both all the while. Fever was likewise

recorded. Tachycardia was additionally found in certain patients. Hotness and redness was found in bosom on nearby assessment of the influenced bosom. Burst abscesses having various necrotic patches were additionally observed on assessment. The temporary determination was made. Routine biochemical examinations were finished. Ultrasound of the two bosoms was done to affirm the analysis. The precise conclusion was made. Cut seepage was chosen as a surgery. Assent was taken and patients were moved to Operation Theater for the cut waste and discharge for culture/biopsy was taken to see the histopathology of the illness. .

Pus and wall of the affected part was taken for Culture/ Sensitivity and Biopsy. The results were recorded. 30 (50%) patients were noted to have Staphylococcus Aureus as causative agent. The reports of 10 (16.66%) patients showed E.Coli. 10 (16.66%) patients were affected by Streptococcus and 10 (16.66%) were victim of Mycobacterium organism. Incision drainage was done in all patients. This procedure has also complications. Scarring was seen in 13 (21.66%) patients only. Pain was recorded in 20 (33.33%) patients. Fistula was developed by 2 (3.33%) patients only. Recurrence was zero. Breast asymmetry was among 4 (6.66%) patients only. Retraction of nipple and areola was in 1 (1.66%) patient only.

Results:-

This study included total 60 patients with history of lactation. There was age difference found among all patients. The average age was found to be 30 years. 10 (16.66%) patients aged between from 18 to 25 years. 30 (50%) patients age was between 26 to 35 and 15 (25%) patients were of age from 36 to 45. Only 5 (8.33%)were of age between 46 to 50 years.

Table 1

S.NO:	AGE IN YEARS	NO OF PATIENTS	PERCENTAGE
1	18-25	10	16.66%
2	26-35	30	50%
3	36-45	15	25%
4.	46-50	5	8.34%
TOTAL	18-50	60	100%

Table 2

S.NO:	MICRO ORGANISM	NO OF PATIENTS	PERCENTAGE
1	Staphylococcus Areus	30	50%
2.	Streptococcus	10	16.66%
2	E. Coli	10	16.66%
3	Mycobacterium tuberculosis	10	16.66%
TOTAL		60	100%

S.NO:	COMPLICATIONS	NO OF PATIENTS	PERCENTAGE
1	Scarring	13	21.66%
2	Breast Asymmetry	4	6.66%
3	Pain	20	33.33%
4	Fistula	2	3.33%
5	Recurrence	0	0
6	Retraction of nipple and areola	1	1.66%
TOTAL			66.64 %

Discussion:-

Breast abscess is simply defined as the localized collection of inflammatory exudates or pus in the breast tissue. It commonly occurs when mastitis or cellulites progresses or does not respond to conservative management. It can also be a result of breast infection directly. In a study, its incidence was reported in breastfeeding mothers was 0.1%. It can also develop as complication of secondary disease like periductal mastitis, skin infection over the breast or granulomatous lobular mastitis. [9] The breast abscess is commonly detected in lactating women as compared to non lactation females. Its presentation is different in patients. Some present with small abscesses and others come with large abscesses even the burst abscesses.[10] In India, the treatment of large abscesses is done by suction drainage but in Pakistan the procedure commonly done is incision drainage. In our study, incision drainage is studied as the best treatment option for breast abscesses in lactating mothers.[11] Ankit Bharat in study has claimed the increased ratio of non lactation abscess but in Pakistan, lactation abscess are common. In third world countries, breast TB affects less than 1% of total breast abscess incidence. Histopathology in our study showed that Mycobacterium Tuberculosis affects 10(16.66%) of patients out of 60. Baharoon et al reported incidence of breast abscess as rare in extrapulmonary TB cases. Sir Astley Cooper reported TB mastitis as the pioneer case.[12] In one study, cigarette smoking has found to be causative factor for breast abscess. It affects the ductal secretions causing fibrosis in retroareolar tissue.

Bundred et al found that anaerobic bacteria cause breast abcess in smokers only.[13] In a study, the mammary fistulae were found to be as complication of breast infection in 1-2% of women. In our study, fistula was found in 3.33% patients. In a study, staphylococcus aureus is the most common causative organism. In our study, Stapphylococcus aureus is found as causative agent in 50% of patients.[14]

Conflict of Interest: The study has no conflict of interest to declare by any author.

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References:-

1. Patani N, MacAskill F, Eshelby S,et al. Best-practice care pathway for improving management of mastitis and breast abscess. Br J Surg. 2018 Nov;105(12):1615-1622.

2. Rao R, Ludwig K, Bailey L et al. Select Choices in Benign Breast Disease: An Initiative of the American Society of Breast Surgeons for the American Board of Internal Medicine Choosing Wisely® Campaign. Ann. Surg. Oncol. Oct 2018 ;25(10):2795-2800.

3. Zhang Y, Zhou Y, Mao F, Guan J, Sun Q. Clinical characteristics, classification and surgical treatment of periductal mastitis. J Thorac Dis. 2018 ;10(4):2420-2427.

4. Leung SS. Breast pain in lactating mothers. Hong Kong Med J. 2016 Aug;22(4):341-6.

5. Agrawal S, Yadav VS, Srivastava A, Kapil A, Dhawan B. Breast abscess due to *Salmonella paratyphi* A : Case reports with review of literature. Intractable Rare Dis Res. 2018 May;7(2):130-133.

6. Meretoja T, Ihalainen H, Leidenius M. Inflammations of the mammary gland. Duodecim. 2017;133(9):855-61.

7. Saboo A, Bennett I. Trends in non-lactation breast abscesses in a tertiary hospital setting. ANZ J Surg. 2018 Jul-Aug;88(7-8):739-744.

8. Li J. Diagnosis and Treatment of 75 Patients with Idiopathic Lobular Granulomatous Mastitis. J Invest Surg. 2019 Aug;32(5):414-420.

9. David M, Handa P, Castaldi M. Predictors of outcomes in managing breast abscesses-A large retrospective single-center analysis. Breast J. 2018 Sep;24(5):755-763.

10. Irusen H, Rohwer AC, Steyn DW, Young T. Treatments for breast abscesses in breastfeeding women. Cochrane Database Syst Rev.Aug 2015; 17;(8):112-15

11. Brown S, Thekkinkattil DK. Tuberculous cold abscess of breast: An unusual presentation in a male patient. Gland Surg. 2016;5:361–365.

12. Tauro LF, Martis JS, George C, Kamath A, Lobo G, Hegde BR. Tuberculous mastitis presenting as breast abscess. Oman Med J. 2011;26:53.

13. Mallick D, Saha M, Chakrabarti S, Chakrabarty J. Tubercular breast abscess-A diagnostic dilemma. J Nepal Health Res Counc. 2014;12:138–140.

14. Marinopoulos S, Lourantou D, Gatzionis T, Dimitrakakis C, Papaspyrou I, Antsaklis A. Breast tuberculosis: Diagnosis, management and treatment. Int J Surg Case Rep. 2012;3:548–550.