



MAMMARY FISTULA POST BREAST ABSCESS INCISION AND DRAINAGE

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ABSTRACT

Objective: Frequency of mammary fistula formation in cases of lactating women with breast abscesses managed by incision and drainage. **Methodology:** This descriptive case series study was carried out at Surgical Department, Sheikh Zayed Hospital, Rahim Yar Khan between November 2017 to May 2018. In the present study lactating women of age more than 20 years irrespective of their gravida, parity and duration of lactation suffering from breast abscess were selected. The diagnosis of breast abscess was made on the basis of clinical signs and USG. These cases were managed by incision and drainage and clear milk discharge from the site of the surgery was labelled as mammary fistula. **Results:** In this study, 114 lactating women having mean age 31.56 ± 4.56 years were selected. Mammary fistula was observed in 7 (6.14%) out of 114 cases. Fistula was more in age group 20 to 29 years affecting 3 (6.67%) cases; with $p=0.76$. Mammary fistula was high in cases that had abscess over the left side where it was observed in 5 (7.57%) cases with $p=0.16$. **Conclusion:** Mammary fistula not rate after incision and drainage of breast abscess and is more common on left side.

KEYWORDS: Lactation, Fistula, Incision.

INTRODUCTION

Lactating mothers are encountered with a number of problems that can interfere the lactation which is always preferred choice for neonates. Amongst these common disorders breast abscess formation is very common due to infection through the breaches in the nipple and introduction of the inflammation to the breast parenchyma. Apart from the infection, the other etiologies are also not uncommon and include malignancy and cellulites over the skin. The overall incidence of breast abscess in lactation is 6%.^[1-2]

The diagnosis is usually clinical and is made on the basis of pain, tenderness, fullness and swelling at the site of involvement and uncommonly can communicate with skin and forms a sinus. Radiological correlation in the form of Ultrasonography (USG) can help to document the associated malignancy or also to quantify the amount of abscess collected.^[2] There are few risk factors that have shown their association with abscess formation and include high tobacco used, higher maternal age and first pregnancy.^[3-4]

Incision and drainage is the treatment of choice but is not spared on complication risk. Mammary duct fistula is a well known but variably reported complication and is defined as an abnormal communication between a major sub areolar duct and the skin, usually in the peri areolar

region. It can further complicate the overall scenario and add to overall morbidity in such cases.^[4-5]

OBJECTIVE

Frequency of mammary fistula formation in cases of lactating women with breast abscesses managed by incision and drainage.

MATERIAL AND METHODS

Study Design

Descriptive cases series study

Study Setting

Surgical Department, Sheikh Zayed Hospital, Rahim Yar Khan

Duration of study

November 2017 to May 2018

Sampling technique

Non-probability consecutive sampling.

In the present study lactating women of age more than 20 years irrespective of their gravida, parity and duration of lactation suffering from breast abscess were selected. The diagnosis of breast abscess was made on the basis of clinical signs and symptoms of tenderness, warm temperature of the skin and swelling of the breast with

later on confirmation with USG breast to label the collection. The cases suffering from any breast malignancy, those with immunocompromised state and with end organ liver or renal failure were excluded. Then these cases were managed by incision and drainage and the were followed weekly for total 4 weeks where final outcome was seen and if there were clear milk discharge from the site of the surgery, it was labelled as mammary fistula.

Statistical analysis

The data was processed by the help of SPSS-version 22. Chi square test was applied Post stratification and p value < 0.05 was considered as significant.

Table I: Mammary fistula and Age.

Age	Mammary fistula		Total	p value
	Yes	No		
20-29	3 (6.67%)	42 (93.33%)	45 (100%)	
30 or more	4 (5.80%)	65 (94.20%)	69 (100%)	0.76
Total	07 (6.14%)	107 (83.86%)	114 (100%)	

Table II: Mammary fistula and anatomical breast side.

Anatomical Side	Mammary fistula		Total	p value
	Yes	No		
Left	5 (7.57%)	61 (92.43%)	66 (100%)	
Right	2 (4.17%)	46 (95.83%)	48 (100%)	0.16
Total	07 (6.14%)	107 (83.86%)	114 (100%)	

DISCUSSION

Mammary fistula is an under rated but often encountered entity and can reveal a long list of etiologies leading to this. A prior history of the breast abscess managed by incision and drainage is the most commonly reported entity. It is denoted as clear milk discharge when a major lactating duct communicates with the skin; adding a high degree of symptomatology; though clinically insignificant.

Mammary duct fistula in lactating women after incision and drainage of the breast abscess in the present study was observe in 7 (6.14%) out 114 cases. the finding of the present study was almost similar to the study done by Gul et al where the prevalence of this fistula was seen in 4 (6.6%) out of 60 cases managed by I/D (incision and drainage).^[6] However; contradictly, a higher degree of occurrence was noted in a study by Shirin L et al where they found this in 16 (30.8%) out of 52 cases in their study.^[7] The reason of this significantly difference in unclear.

There was no significant difference in terms of age groups or the side of the breast. Similar was seen in the present study. However, the mammary fistula was more seen in cases with higher age groups in previous studies. In the preset study fistula was more in age group 20 to 29 years affecting 3 (6.67%) cases with p= 0.76 as compared to higher age group. There were also

RESULTS

In this study, 114 lactating women suffering form breast abscess were included. The mean age of the participant was 31.56±4.56 years. There were 66 cases that had right sided breast abscess. After incision and drainage, the mammary fistula was observed in 7 (6.14%) out of 114 cases. Fistula was more in age group 20 to 29 years affecting 3 (6.67%) cases; with p= 0.76 as in table I. Mammary fistula was near significantly high in cases that had abscess over the left side where it was observed in 5 (7.57%) cases with p= 0.16 as in table II.

contradicting results in the previous studies; though higher age was more susceptible for this⁸⁻⁹ According to a study by Rees BL and then also supported by Demirel AH et al found this more in cases with age more than 35 years; but with insignificant results having p value of 0.21.^[10]

CONCLUSION

Mammary fistula not rate after incision and drainage of breast abscess and is more common on left side.

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