Tuberculosis in Lactational Abscess - Study at a Tertiary Care Center

Authors
Radhika Rai, Samir Kathale

Abstract
Background: Tuberculosis of the breast is a very rare occurrence accounting for approximately 4% of all breast lesions in countries where tuberculosis is rampant. Tuberculosis of breast is a disease seen in young lactating multiparous women. Tuberculosis of breast has varied presentation ranging from an abscess or a painless breast mass. India is a country which is endemic for tuberculosis; hence early diagnosis of tuberculosis is needed so that effective anti-tuberculous therapy can be started and the disease can be eradicated.

Aims: In view of the above said we considered to study the varied presentations of lactational abscess and to highlight the importance of tuberculosis as a cause of breast abscess in lactating mothers.

Methods and Material: This is a prospective study done between a period of 1 year from between January 2014 to December 2014 chosen by purposive sampling technique. The patients who met the inclusion and exclusion criteria were subjected to a thorough anesthetic workup and then the drainage was done using 22 gauge needle, the pus was sent for culture and abscess wall contents and the cavity tissue for histopathological examination. The collected data was analyzed.

Statistical Analysis: Percent and frequency were used for statistical analysis.

Results: Out of the 60 patients the commonest age group was between 21-30 years (32%) and symptom was mastalgia (100%). Both patients (100%) responded well to 6 months of anti-tuberculosis treatment with disappearance of axillary lymph nodes.

Conclusion: Lactational abscess can be one of the presentations of tuberculosis of breast. In an endemic area careful evaluation of the lactational abscess has to be done so that early diagnosis of can be done and effective anti-tuberculous therapy can be given.

Keywords: Tuberculosis abscess, lactational abscess.

Introduction
Tuberculosis disease of the breast is a very rare occurrence. Tuberculosis of the is a disease that commonly affects young lactating multiparous women. Tuberculosis of breast has varied presentation ranging from an abscess or a painless breast mass. India is a country which is endemic for tuberculosis; hence early diagnosis of tuberculosis is needed so that effective anti-tuberculous therapy can be started and the disease can be eradicated.

Methods and Methods
This was a prospective study conducted, after obtaining an ethical clearance for the study. All consenting patients who presented with lactation breast abscess and masses were chosen using purposive sampling technique after they met the predefined criteria which exclude patients who...
had evidence of undergoing prior treatment for tuberculosis, or patients who had people in their family or workplace who were being treated for or had already completed treatment for any type of tuberculosis. History was taken and clinical examination was done to see who was fit for anesthesia. The drainage procedure was done by FNAC, the pus was sent for culture and abscess wall contents and the cavity tissue for histopathological examination after surgical intervention. The culture report was traced and when it came the antibiotics were changed accordingly keeping in mind the lactational period and breast feeding status of the period. The collected data was analyzed by percentage and frequency was used for statistical analysis.

**Results**

Out of the 60 patients our study, the demographic evaluation revealed, forty one patients were from rural and fourteen were from urban areas. The patients fell in the age range 18 to 42 years with a mean of; the commonest age group was between 21-30 years (32%). The symptoms with which the patients presented were fever (68%), mastalgia (100%) and lump (14%). Two patients had multiple axillary nodes enlarged, non-matted. Staphylococcus aureus (42 patients) was the most common organism causing abscess followed by streptococcus (18 patients). Tuberculosis was diagnosed as the cause in four patients both by histology in them one patient had AFB bacilli in the gram stain. Both these patients were above 30 years and were multiparous. They presented at 6 and 10 months postpartum respectively. They were asked to discontinue the breast feeding and were started on anti-tubercular therapy which they both tolerated well. Patients are on follow up since 1 year with no recurrence or evidence of tuberculosis elsewhere in the body. The children are also healthy and doing well.

**Fig. 1:** Age Distribution of Lactational Abscess
Discussion
Sir Astley Cooper has the credit of reporting the first case of tuberculosis of breast which he called the ‘scrofulous swelling of the bosom’\(^1\). Tuberculosis disease of the breast also called mammary tuberculosis is a very rare occurrence\(^2\). Mammary tuberculosis accounts for approximately 4% of all breast lesions in countries where tuberculosis is rampant\(^3\). Tuberculosis disease is also seen in young lactating multiparous women\(^4\). Mammary tuberculosis has varied presentation ranging from an abscess or a painless breast mass. Tuberculosis of the breast has been classified clinically as (a) nodulocaseous tubercular mastitis, (b) disseminated/confluent tubercular mastitis, and (c) tubercular breast abscess.\(^5\) Breast TB is classified mammographically and pathologically into a nodular form, a disseminated form, and a sclerosing form\(^6,7\). India is a country which is endemic for tuberculosis\(^8\). Mammary tuberculosis is a paucibacillary disease and so the routinely done microscopy, culture and nucleic acid amplification tests such as polymerase chain reaction techniques do not have the same diagnostic utility as they do in pulmonary tuberculosis\(^9-11\).
In our study the comment age group was 21-30 years in contrast to a study by Bharat.et al\textsuperscript{12} which the lactational abscess were seen more commonly above 30 years in the lactational breast. In another study they showed that mammary tuberculosis was common on right side, with the disease affecting the right breast in eleven patients (55%) and the left breast in nine patients (45%) which is comparable to our study\textsuperscript{13}. Breast feeding is not absolutely contraindicated in tuberculosis and anti-tubercular therapy is indicated in breast tuberculosis\textsuperscript{14-16}.

**Conclusion**

Lactational abscess can be one of the presentations of tuberculous of breast. In an endemic area careful evaluation of the lactational abscess have to be done so that early diagnosis of can be done and effective anti-tuberculous therapy can be given.

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**References**
