



CLINICAL PROFILE AND OUTCOME OF TUBERCULAR MASTITIS - A RETROSPECTIVE STUDY AT PRAVARA RURAL HOSPITAL, LONI.

Medical Science

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ABSTRACT

Tubercular mastitis is rare, difficult to diagnose and mistaken for cancer or abscess. In this retrospective study 7 cases of bilateral tubercular mastitis were encountered over a period of 6 years. The presentation was a breast abscess with sinus in 1 case, breast abscess in 4 cases, and lump in breast in 2 cases. There was no axillary lymphadenopathy. Diagnosis was confirmed by Fine Needle Aspiration Cytology (FNAC) or Z.N. staining. Antitubercular Cat I therapy formed the main stay of treatment. It is difficult to diagnose and are mostly misdiagnosed as Breast cancer or abscesses. Only 7 cases of mammary tuberculosis were reported in this 8 year - retrospective study profile, outcome of bilateral tubercular mastitis were studied.

KEYWORDS

Primary, Mastitis, Z. N. Stain.

INTRODUCTION

Retrospective study was done for six months. The non-lactating females suffering from proved primary bilateral tubercular mastitis and taking treatment from DOTS center of the Pravara Rural Hospital were included in this project.

MATERIAL AND METHOD-

• AIM-

To study the clinical profile and outcome of tubercular mastitis cases.

• OBJECTIVES

To describe the clinical profile and to evaluate the treatment of Tubercular Mastitis.

- Inclusion criteria: Records and case files of all nonpregnant female patients who attended the surgical O.P.D. and taken antitubercular treatment from DOTS center of Pravara Rural Hospital, Loni and were diagnosed as tubercular mastitis.

- Females from the age 20 to 60 years.

• EXCLUSION CRITERIA:

1. Incomplete records and case files (OPD/ IPD)
2. All Pregnant female patients, Male and Children.
- All the patients satisfying inclusion and exclusion criteria were included.

- All 7 cases were selected as per inclusion criteria and studied as per performa.

• PERFORMA-

1. Name
 2. Age
 3. I.P.D/O.P.D
 4. Date of starting treatment
 5. Management plan.
 6. Investigations-Discharge for Z.N. staining/ Biopsy.
- Their clinical profile as per the proforma, planned management and outcome were studied.
 - Variables:
 - Sample size- 07 patients.
 - Study period: 6 months- From 1/7/2017 to 31/12/017.
 - Outcome:
 - Time taken to start anti-tubercular treatment
 - Healing
 - Hospital stay
 - Tools of study:
 - Patient record sheet.
 - No additional expenditure required.
 - No probable risk to the participant.

- All the private and confidential information of the patients handled by principle investigator.

• OBSERVATIONS-

- This retrospective study was conducted for 6 months. The cases that attended the surgical outdoor from 2011 to 2018 were collected.

• Table 1-Observations were done as per Performa-

Age	Presentation	Investigations	X-ray chest-	PCR
4 cases- 23to40yrs. 4cases-60 to 65.	1.Abscess -5cases- Nodular masses- 2cases	1.Aspiration- Z-N staining- Acid fast bacilli -5cases 2. Biopsy- 2Cases- Granulomatous lesion with giant cells.	Normal	Negative.

All patients received Category I antitubercular drugs for 9 months and followed regularly. The common age group in our study was 23 – 40 years. The common presentation in younger patients was abscess and in old mass.

Table 2-Relation between recovery and time to start treatment

Time taken to start treatment	Recovery
4 cases-7 days	2 months
3cases-15 days	6 months

Recovery depends on the time taken to start the antitubercular treatment. Early the treatment started early the recovery.

DISCUSSION-

Ethical committee permission was taken.

Tubercular mastitis was first described by Sir Astley Cooper.¹ Tuberculosis of the breast is a rare entity in spite of over one billion people suffering from tuberculosis world wide². The overall incidence of tuberculous mastitis is reported to be 0.1% of all breast lesions in developing countries approximately 3.0% of surgically treated breast disease². Bilateral tubercular mastitis incidence is 3%.³ Breast does not provide suitable environment for the growth and multiplication of mycobacteria tuberculosis⁴. So resistant to tuberculosis like skeletal muscles and spleen. The disease can affect any age group. These literature incidences support our retrospective study. Only 7 cases of bilateral tubercular mastitis in non- lactating female patients of all age groups were included in this retrospective study over the period of 8 years. Table 1 shows that this affects all age groups. More common in the younger age group. Breast abscess is the common presentation in this study. The breast abscess is common in lactating female. Banerjee

found 33% lactating³. The stress and increased vascularity of the breast during lactation facilitates infection and dissemination of the bacilli. Shinde et al found 7% of their patients to be lactating at the time of presentation.⁵

- Seven cases of tuberculosis of breast encountered over eight years period. The clinical profile and outcome in proved tubercular mastitis cases were studied. The present 8 years retrospective study was conducted in Pravara Institute of medical sciences Loni. The data of the patients were collected from records of patients of tubercular mastitis from DOT Center PMT. The study was conducted for 6 months. All these cases were enrolled for the study and subjected to the inclusion and exclusion criteria. This retrospective study showed 7 cases of bilateral tubercular mastitis during the period of 8 years. The non-lactating females from the age 20 years to the menopause and the menopausal patients and proved as tuberculosis of both breasts without the involvement of the other organs.

Tubercular mastitis frequently occurs in females of 20 – 50 years age with variable presentation. They may present as mass in breast mimicking breast malignancy or abscess. So before starting any treatment it is essential to exclude tuberculosis by doing a simple investigation like Zeihl-Nelson staining (Z.N. staining). In our patients the discharges were collected and Z.N. staining showed presence of acid fast bacilli. In the cases where discharge was absent, biopsy was taken. The biopsy revealed granulomatous lesion with caseous necrosis. Fine needle aspiration cytology revealed epithelioid histiocytes or Langhans giant cells which are present in tuberculosis. Clinically and by investigations we excluded the pulmonary and lymph node tuberculosis. Depending on the clinical presentation the line of treatment was decided. All cases received antitubercular drugs followed by surgery if needed.

The breast abscess is common presentation in our study. The breast abscess is common in lactating breast so when it occurs in non-lactating breast, exclude tuberculosis before operating to avoid sinus or ulcer. Nodular mass presentation mimics malignancy. Exclude tuberculosis by biopsy.

This is the aim of this retrospective study to make awareness when treating abscess in nonpregnant female and mass in breast.

- The diagnosis of mammary tuberculosis was confirmed by a combination of clinical suspicion, cytology and staining.
- In our 7 patients tuberculosis was diagnosed by FNAC or Z.N. staining. FNAC revealed epithelioid cell granulomas with caseous necrosis. Our findings supported by the study of Kakker et al. He diagnosed breast tuberculosis by FNAC findings of epithelioid cell granulomas with caseous necrosis in 73% patients⁶. All our patients received Cat I antitubercular treatment comprising rifampicin 450 mg, isoniazid 300 mg, pyrazinamide 1500 mg and ethambutol 800 mg./day for 2 months followed by rifampicin 450 mg, isoniazid 300 mg for another four months.

Tubercular mastitis is primary when no other organ is involved⁵.

Secondary breast involvement is by hematogenous spread.⁶ Tuberculosis in the faucial tonsils of suckling infants leads to higher incidence in lactating women.⁷ Acid fast bacilli can be isolated in the breast biopsies, not in the milk.⁵ Lilleng et al reported by their study that tuberculosis of the male breast is rare.⁸ Clinical varieties of mammary tuberculosis are nodular, disseminated, sclerosis⁹. Discharging sinuses differentiated from Actinomycosis by the absence of sulphur granules in the discharge. Pain in the tuberculous lump is present more frequently than in carcinoma. The involvement of nipple and areola, fixation to the skin are rare in tuberculosis. A high index of suspicion needs to suspect tuberculosis if a breast lump is associated with a sinus or indolent lump. Granulomatous mastitis can also be found in plasma cell mastitis, fat necrosis, Actinomycosis.⁹

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