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## Tuberculosis of Breast - Case Report.

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### ABSTRACT

The breast tuberculosis is a rare occurrence and was mistaken with breast abscess and breast cancer. Tuberculosis of breast was reported from the endemic areas mostly from the India and South Africa. Radiological imaging is not a diagnostic measure. It is based on the identification of typical histological features.

**Keywords:** Tuberculosis, breast, surgical treatment.

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## INTRODUCTION

The first case of tuberculosis breast was recorded by SIR ASTLEY COOPER, who explained it as a scrofulous swelling of the bosom. Tuberculosis breast is one of the rare conditions in breast. It is an uncommon disease in some countries with an incidence of pulmonary and extra pulmonary tuberculosis. Clinically it presents as a solitary hard lump most commonly in the upper outer quadrant of breast. It is most commonly seen in reproductive age group, multiparous and lactating women. It gives a diagnostic problem on radiological and microbiological investigations. It is mostly treated with anti-tuberculosis treatment and surgical approach in some conditions.

## CASE REPORT

30yr premenopausal women reported to us with a lump in right breast of size 8cms x 6cms in the medial upper and lower quadrant for 2 months (fig-1). Mass moves along with breast tissue, firm to hard in consistency, Nipple and areola were normal. Two tender and mobile anterior group of lymph nodes were palpable. Provisional clinical diagnosis of carcinoma breast was made. Ultrasound and mammogram (fig-2) showed a lump in breast of grade BIRADS 3. FNAC showed picture suggestive of granulomatous lesions. As a definitive diagnosis was not established and because of the probability of malignancy along with tuberculosis lumpectomy was done (fig-3) and sent for histopathological examination in which diagnosis of Tuberculosis breast was established. Patient was put on Anti-tuberculosis therapy.



Figure 1: Clinical picture

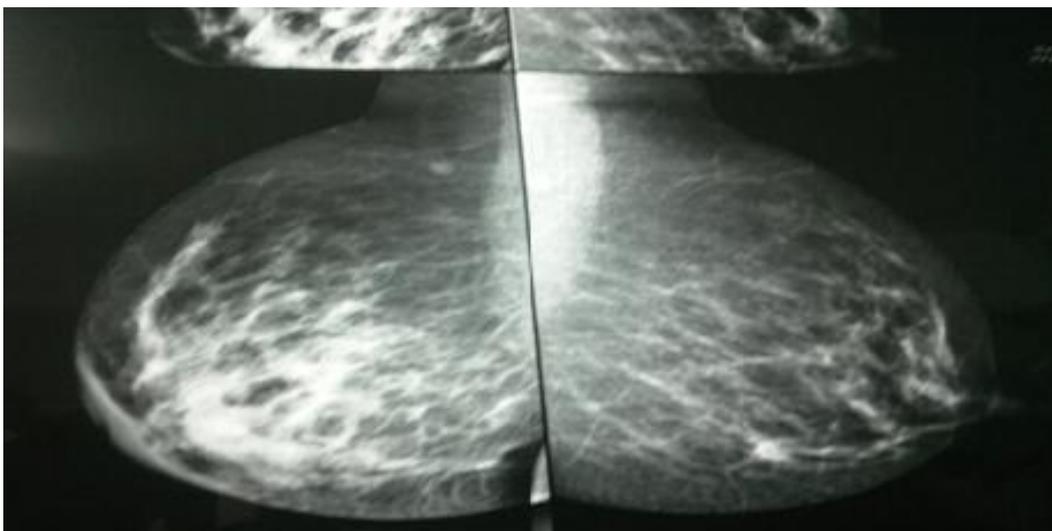


Figure 2: Mammogram



**Figure 3: Operated specimen**

### DISCUSSION

Tuberculosis of breast is a rare condition, mostly because the organs like breast, skeletal muscle and spleen are resistant to infections making the survival of these bacteria difficult. Lactating women may be at a higher risk due to increased blood supply and dilated ducts. Tuberculosis mastitis is usually unilateral. Male patients are affected rarely when they have some immunodeficiency states like HIV infections. Mammary tuberculosis may be primary or secondary. The route of infection to breast may be haematogenous, lymphatic or by direct extension from thoracic wall or the axillary lymph nodes. In rare cases it may spread due to skin abrasions or through the main duct of the nipple. Most of the patients presents with lump in the breast [1]. Most often seen in the upper outer quadrant of the breast, may be hard in consistency with irregular borders with or without fixity to the skin. The lump mostly mimic like a carcinoma of breast [2]. Fistula formation, abscess, skin ulceration and diffuse mastitis [3] may be present in some rare or recurrent conditions. Based on radiological and clinical manifestations it can be characterized as nodular, diffuse or sclerosing form. Various tests are useful in confirming the diagnosis. Mantoux test does not offer definitive diagnosis. The gold standard for diagnosing breast tuberculosis is by ZIEHL NEELSEN STAINING or culture. Mammography is not much useful in younger females. CT scan and MRI [4-6] are useful to evaluate the extension of the lesion beyond the breast. Fine Needle Aspiration Cytology may not able to detect the responsible pathogen, but it may detect the necrosis and epitheloid cell granulomas, leading to definitive diagnosis of 75% cases. Polymerase chain reaction is highly sensitive.

The main differential diagnosis are carcinoma breast, fatty necrosis, perialveolar abscess and rarely some infections like actinomycosis and blastomycosis are to be considered.

The breast tuberculosis is treated with Anti Tubercular therapy for six months (2 months intensive phase with four drugs followed by continuous phase with 2 drugs for 4 months). Surgical excision is mainly for diagnostic purpose and for draining of an abscess, excision of the sinus tract or lump along with ATT.

### CONCLUSION

Breast tuberculosis is a rare disease. This case is presented to highlight the need for differentiating it from carcinoma of breast. Identification of this disease may help avoid many radical procedures and early cure of the condition.

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