

## Case Report

# Primary tuberculous mastitis with cold abscess: a case report

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## ABSTRACT

Primary tuberculosis of the mammary gland is a rare disorder often mistaken for other benign and malignant lesions of the breast. We report a case of 18 year old female who presented with swelling over right breast for 4 months. Later she developed creamy discharge from the swelling followed by decrease in its size. It proved to be a case of Primary tubercular mastitis with breast cold abscess.

**Keywords:** Breast abscess, FNAC, Swelling, Tuberculous mastitis

## INTRODUCTION

Breast tuberculosis is disease with rare occurrence.<sup>1</sup> This was first described by Sir Astley Cooper in 1829 as the “scrofulous swelling in the bosom of young women”. TB mostly affects the lungs as it is an airborne infectious disease, but any organ can be affected as a result of hematogenous spread. It has been suggested that some organs and tissues like the mammary gland tissue and spleen offer resistance to the survival and multiplication of tuberculosis bacillus.<sup>2</sup>

A rare form of disease, disseminated form of breast tuberculosis, is characterized by multiple tubercular foci throughout the breast, which may undergo caseation leading to sinus formation. Breast tuberculosis has no defined clinical features. Radiological imaging is not diagnostic. Diagnosis is based on identification of typical histological features or the tubercle bacilli under microscopy or culture.

Lump is commonly seen in the central or upper outer quadrant of the breast, an extension of tuberculosis from

axillary nodes to the breast. Formation of fistulas and sinus tracts is usually seen in advanced disease or after needle puncture.<sup>3</sup>

## CASE REPORT

We report a case of 18 year old female who presented to department of surgery, Pacific medical college, Udaipur (Rajasthan) with the complaint of painful swelling in right breast for 4 months. Later she developed creamy discharge from the swelling followed by decrease in its size. The size of swelling was approximately 4 cm size. There was no past history of tuberculosis, diabetes mellitus, hypertension, asthma or drug allergy. There was no family history of tuberculosis.

On careful examination, a mobile lump in the upper outer quadrant of the right breast of 4 cm size along with multiple scar mark present at upper outer margin of breast was present. A single palpable gland of 3 cm size was present in the right axilla. Fine Needle Aspiration Cytology (FNAC) of the abscess revealed granulomatous mastitis with superadded acute inflammation.

Drainage of abscess along with excision of cyst wall was done. Histopathological examination of resected specimen showed features of caseating granulomatous lesion with fibroadenosis with Langhan's giant cells were seen at various places. Antitubercular therapy was started.

## DISCUSSION

Tuberculosis of the breast is an uncommon disease, with an incidence between 0.1%-3% of all breast diseases treated surgically.<sup>4</sup>

TB continues to be a frequent cause of mortality and morbidity, with an incidence rate of 150 cases per 100000 people in 2005. Currently, one person becomes newly infected every second worldwide. High incidence of breast tuberculosis is presumed in India despite only few hundred cases of breast tuberculosis reported, probably due to lack of awareness of manifestation of disease or misdiagnosis.<sup>2</sup>

The incidence of tuberculosis, in general, is still quite high in India and so is expected of the breast tuberculosis. But the disease is often overlooked and misdiagnosed as carcinoma or pyogenic abscess.<sup>5</sup>

The disease may be of primary etiology when infection affects breast only or may result from other foci in the body, which is termed as the secondary tuberculosis of breast. No evidence of tuberculosis was present in the body in present case. Hence it was a primary case of tuberculosis which is quite rare.

Breast TB can mimic breast carcinoma or breast abscess, clinically and radiologically. Concomitant axillary lymph nodes were found in one-third of the patients with breast TB.<sup>6</sup>

The differential diagnosis of breast TB includes other granulomatous inflammatory diseases, such as idiopathic Granulomatous Mastitis (GM), sarcoidosis, Wegener's granulomatosis and giant cell arteritis, as well as other infections like actinomycosis and fat necrosis.<sup>7</sup>

Cytological and microbiological studies can be employed with ultrasound guided fine-needle aspiration. Diagnosis is based on identification of typical histological features or the tubercle bacilli under microscopy or culture.<sup>8</sup> High

index of suspicion is significant in such type of cases. As in present case FNAC along with histopathological examination confirmed the suspicion of tubercular breast abscess.

## CONCLUSION

All the cases of breast abscess should be thoroughly investigated to formulate the further line of management. The disease should be diagnosed timely, to provide close follow-up and appropriate treatment. The clinical features and history of patient should be keenly looked for to reach at a final diagnosis.

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