



Granulomatous Mastitis – A Case Series

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Introduction:

Breast tuberculosis is an extremely rare extrapulmonary manifestation of tuberculosis. The incidence of breast tuberculosis is less than 1% of the total breast pathologies in the world. It accounts for almost 4% of all breast pathologies.

Aim:

To analyse the cases of granulomatous mastitis treated at Sri Ramachandra Medical College between 2013 and 2015.

Methodology:

This is a retrospective study wherein all cases of granulomatous mastitis were taken between the years of 2013 to 2015 at Sri Ramachandra Medical College.

Inclusion Criteria:

Age more than 18 years.
Both sexes were included.
Only primary breast tuberculosis cases.

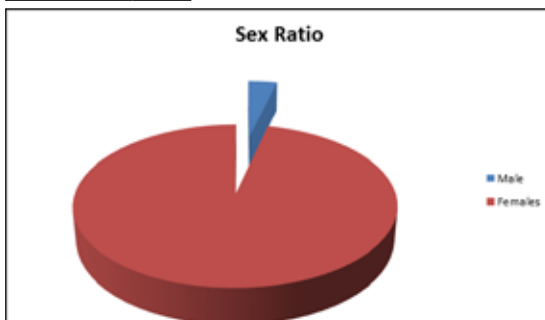
Exclusion Criteria:

Secondary granulomatous mastitis

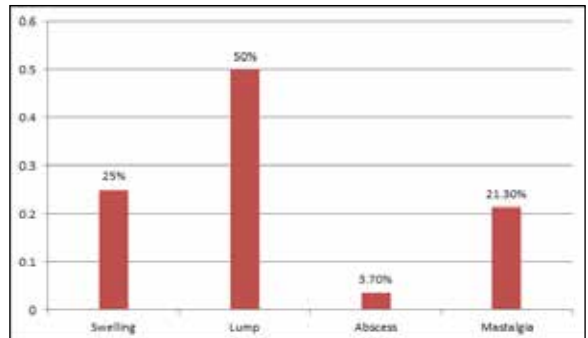
Results:

A total of 28 patients were diagnosed with granulomatous mastitis. 27 were females and 1 was male. The mean age was 35 years and all patients presented for the first time. There was a varied presentation, breast lump (50%), mastitis (25%), mastalgia (21.3%) and breast abscess (3.7%).

Male	1
Females	27



Swelling of the breast	25%
Lump	50%
Breast Abscess	3.7%
Mastalgia	21.3%



Diagnosis:

Various modalities are used for diagnosis granulomatous mastitis. The Mantoux test, Imaging modalities like sonomammogram, FNAC (investigation of choice in case of lump), Culture, PCR gene amplification method, Core biopsy or excision biopsy are the various modalities of diagnosing granulomatous mastitis.

Treatment:

Anti Tuberculous Therapy (ATT) as per the Revised National Tuberculosis Control Programme of India (RNTCP) guidelines for extra pulmonary tuberculosis are started with or without minimal surgical intervention. As per RNTCP guidelines Category III regimen (2HRZ/4HR) for less severe forms of extrapulmonary tuberculosis and Category I (2EHRZ/4HR) for more severe forms of extra pulmonary tuberculosis. The first line of drugs being Ethambutol 1200mg (E), Streptomycin 750mg (S), Rifampicin 450mg (R), Isoniazid 600mg (H) and Pyrazinamide 1500mg (Z). The drugs are administered thrice weekly. The overall prognosis is good.

Classification of breast tuberculosis:

Breast tuberculosis was first classified into five different types by Mckeown and Wilkinson:

- Nodular tubercular mastitis,
- Disseminated or confluent tubercular mastitis,
- Sclerosing tubercular mastitis,
- Tuberculous mastitis obliterans, and
- Acute miliary tubercular mastitis.

Later on breast tuberculosis was reclassified as nodular, disseminated and abscess varieties. The sclerosing type, mastitis obliterans and miliary variety are of historical importance only.

Differential Diagnosis:

Breast tuberculosis versus carcinoma breast: Clinical examination often fails to differentiate carcinoma breast from tuberculosis and high index of suspicion is necessary. Factors predictive but not diagnostic of breast tuberculosis include constitutional symptoms, mobile breast lump, multiple sinuses, and an intact nipple and areola in young, multiparous or lactating females. Nipple retraction, peau d'orange, and involvement of axillary lymph nodes are more common in malignancy than in tuberculosis. Mammography is not of much help as the findings in carcinoma in advanced stage are similar to that of tubercular lesion. Carcinoma and tuberculosis of the breast occasionally co-exist. Similar finding in the axillary lymph nodes may also be seen. In assessing diagnosis it is therefore important to remember that recognition of tuberculosis does not exclude concomitant breast cancer.

Conclusion:

Extrapulmonary tuberculosis occurring in the breast is extremely rare. Breast tuberculosis is uncommon even in countries where the incidence of pulmonary and extrapulmonary tuberculosis is high. In the absence of well-defined clinical features, the true nature of the disease remains obscure and it is often mistaken for carcinoma or pyogenic breast abscess. It also presents a diagnostic problem on radiological and microbiological investigations and thus high index of suspicion acquires an important position. Caseating epithelioid cell granulomas in the tissue samples are diagnostic of tuberculosis. The disease is eminently curable with the modern antitubercular chemotherapeutic drugs with surgery playing a role in the background only.

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