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## An Interesting Case of Swelling in Breast in A 27 YR Old Lady: A Case Report.

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### ABSTRACT

Idiopathic Granulomatous disease of the breast is a rare inflammatory disease of the breast which is diagnosed after other granulomatous lesions of the breast are excluded. Patient usually presents with a hard lump in unilateral breast with other signs like nipple retraction, nipple discharge, ulceration, peau d orange appearance, mimicking the features of breast carcinoma. This was a 27 year old woman presenting with swelling in right breast with progressively increasing pain for one month. FNAC done previously showed ductal epithelial cells with stromal cells and acute inflammatory cells and was diagnosed as inflammatory smear. Excision biopsy was done and sent for histopathological examination which revealed non caseating granulomatous lesion consisting of lymphocytes, plasma cells, histiocytes and multinucleated giant cells. AFB done proved to be negative. A diagnosis of Idiopathic Granulomatous disease of the breast was made. This case has been presented for its rarity and for the fact that it's a mimicker of breast carcinoma.

**Keywords:** Idiopathic Granulomatous disease of breast, breast carcinoma

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## INTRODUCTION

Granulomatous inflammatory lesions of the breast can be divided into idiopathic granulomatous mastitis and granulomatous mastitis occurring as a rare secondary complication of a host of other conditions as Tuberculosis, Sarcoidosis, Wegeners Granulomatosis. Some forms occur as a complications of systemic diseases such as Diabetes Mellitus and due to injections of foreign body reactions. Idiopathic Granulomatous mastitis was first described by Kessler and Wolloch in 1972 [1]. Precise diagnosis is very essential as treatment is different for idiopathic granulomatous mastitis and other granulomatous lesions of the breast.

## CASE REPORT

A 27 yr old female presented with swelling in the right breast for last one month, progressively increasing in size with history of pain. Pt also presented with fever after trucut biopsy was done. FNAC previously done showed ductal epithelial cells admixed with stromal cells and acute inflammatory cells and was diagnosed as Inflammatory Smear. Trucut biopsy was diagnosed as Fibrocystic disease with epitheliosis. A provisional diagnosis of Antibioma was made. An Excision Biopsy was done and sent for histopathological examination.

## PATHOLOGICAL FINDINGS

Gross examination: Received a elliptical piece of skin measuring 8x1.5 cm. Overlying fatty tissue measures 16x 10x5 cm. Cut surface showed purulent exudates with whitish areas. Microscopic examination: Multiple sections studied show breast parenchyma enclosing multiple foci of non caseating granulomatous reaction composed of lymphocytes, plasma cells, histiocytes and multinucleated giant cells. Focal areas of hemorrhage and congested capillaries were seen.

**IMPRESSION:** A diagnosis of Granulomatous Mastitis and special stain for AFB was ordered which proved to be negative.

## Gross Picture



## MICROSCOPIC IMAGES

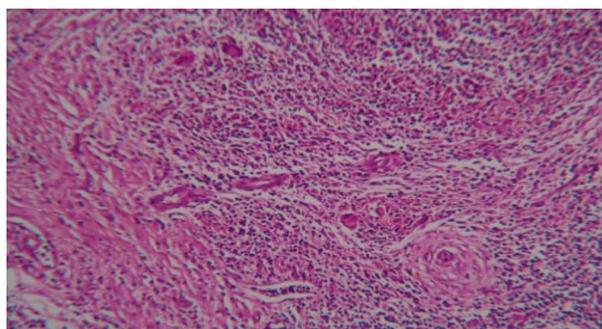


Figure i: 10X Breast Parenchyma Enclosing Multiple Granulomatous Lesions

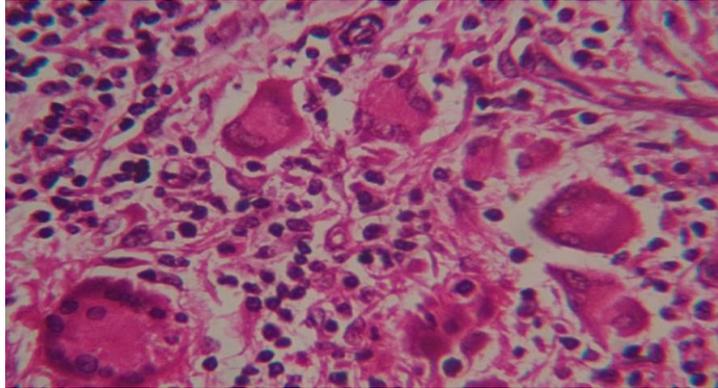


Figure ii: 40X Multiple Granulomatous Lesion

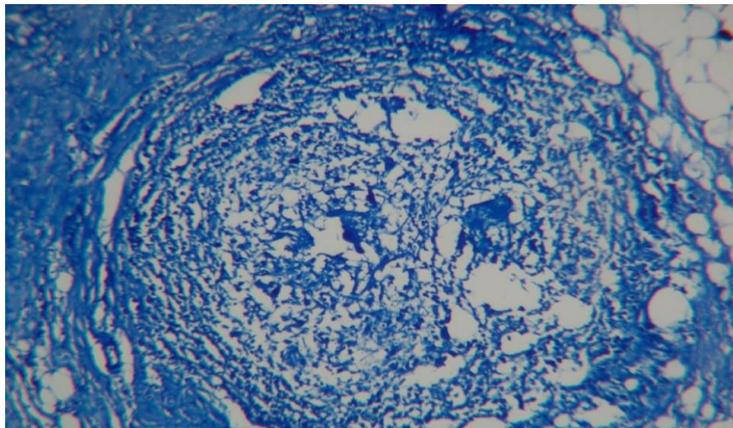


Figure iii: 10X Special Stains For AFB Negative

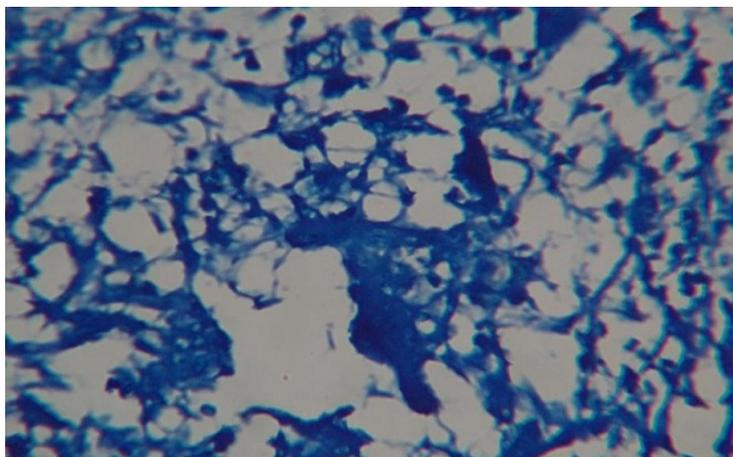


Figure iv: 40X AFB Stain Negative For Bacilli

#### DISCUSSION

Idiopathic Granulomatous Mastitis or lobular granulomatous mastitis is a term that has been proposed for a granulomatous inflammatory process of the breast characterized by the presence of noncaseating granulomas, confined to breast lobules in which no microorganisms are found, and it is usually a painful, tender and firm mass [1, 2]

The average age of this condition is between 17-42 years and can occur in a pregnancy [3]. That the disease may be immunologically mediated like in granulomatous thyroiditis has been made [4,5]. In Indian

conditions Tuberculosis is an important differential diagnosis, in which grossly multiple sinuses and areas of caseation necrosis are seen [6]. Microscopically multiple caseating granulomas are seen. These can be mistaken for advanced breast carcinoma. In our case special stain for AFB was negative Other condition which can cause granulomas in the breast is Sarcoidosis and Wegeners which can be systemic or localized [7].

Granulomatous Mastitis could also be side effect of foreign body reaction to silicone or polyvinyl plastic [8]. Imaging modalities like USG and MAMMOGRAM show an irregular and ill-defined mass with irregular hypoechoic mass lesions and parenchymal heterogeneity mimicking breast carcinoma [9].

This condition has a lengthy array of differential diagnosis and it is very important to rule out other causes before diagnosing Idiopathic Granulomatous Mastitis

### **CONCLUSION**

Idiopathic Granulomatous Mastitis is a rare condition with an uncommon etiology usually occurring in young female and can occur in pregnancy. It has wide array of differential diagnosis which have to be excluded before diagnosing Idiopathic Granulomatous Mastitis. This condition should not be misdiagnosed as Breast carcinoma .This case has presented for its rarity and the fact that only histopathological examination can give accurate diagnosis.

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