



## DIABETIC MASTOPATHY :MIMICKER OF BREAST CANCER AN INTRIGUING CASE

### Radiodiagnosis

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### ABSTRACT

Diabetic Mastopathy is a benign entity that may mimic carcinoma. It is also called as Lymphocytic Mastitis. It is the stromal proliferation associated with perivascular lymphocytic collections that can form a mass. It is frequently associated with autoimmune diseases. We report an interesting case of Diabetic Mastopathy/Lymphocytic Mastitis with characteristic findings on ultrasound with histopathology correlation.

### KEYWORDS

Diabetic mastopathy, Breast mass, Mimickers, Sonography.

### INTRODUCTION

Diabetic mastopathy also called as Diabetic fibrous breast disease or lymphocytic mastitis is a benign entity affecting diabetic patients that mimicks breast carcinoma. We present a case of a diabetic middle aged woman who presented with a left breast lump. Clinical examination and ultrasonography findings suggested breast carcinoma. However, Pathological diagnosis revealed lymphocytic/Diabetic mastopathy. After glycaemic control, there was marked interval reduction in the size of the lump. Our case report suggests that not all malignant looking breast masses are really malignant.

### CASE STUDY

42 year old female patient came to the surgery OPD with the complaints of a painless palpable lump and itching in the left breast for past 2 months.

### Personal History:

Attained menarche at 11 years. Her first pregnancy is at the age of 21. She is gravida 2 Para 2 Live 2. Breast fed each of her 2 children until 1 year of age. Her Last menstrual period is

### Past History:

She is a known case of Type 2 diabetes mellitus for past 6 years, taking On and off metformin.

On Physical examination, The left breast showed skin erythema on inspection and a palpable hard lump in the lower outer quadrant of the left breast. Right breast examination was normal. B/L axilla were normal on palpation. Abdominal examination was normal. Her Blood pressure was 130/80 mm Hg.

She was advised Ultrasonography of Bilateral breasts and few laboratory tests to be done.



### Investigations:

Her Laboratory reports revealed

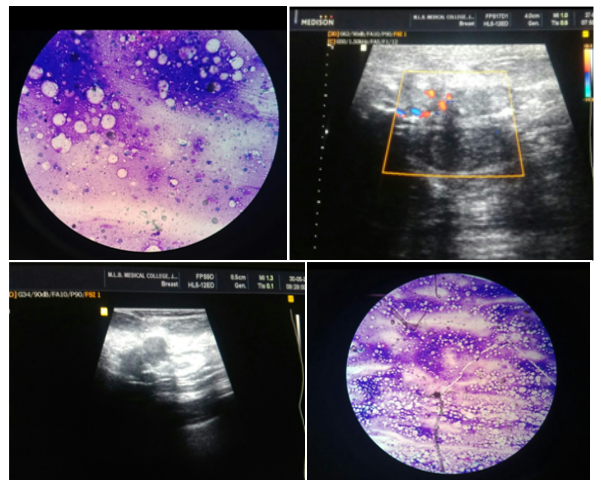
- Normal complete blood count
- Raised Erythrocyte sedimentation rate (ESR)
- Her fasting blood glucose level was 146 mg/dl. Her HbA1c was

6.9%.

- Her lipid profile, liver function test and renal function tests were within normal limits.

### Ultrasound findings in the left breast:

- An ill defined, heterogenous mass lesion of size 36x 27 mm is noted with indistinct margins at 4 O' clock position of left breast with minimal internal vascularity. No evidence of calcifications within the mass. There is associated evidence of skin erythema and skin thickening. No evidence of nipple retraction.
- No evidence of axillary lymph nodes.
- The findings were highly suggestive of malignancy. ACR Birads 5 category. Advised Tissue biopsy for further confirmation.
- Ultrasound of the right breast and right axilla were normal.
- After one month treatment with insulin and metformin, the patient came for follow up ultrasound that showed significant interval reduction in the size of breast mass measuring 18x 6 mm on the left side.



### Before Insulin

### After Insulin

Smears are cellular showing stromal fibrosis and mixed inflammatory infiltrates comprising of predominantly lymphocytes mostly in perivascular distribution... Findings are suggestive of Lymphocytic mastitis.

### DISCUSSION

Diabetic mastopathy aka Lymphocytic mastitis is an uncommon benign lesion that may clinically and radiologically mimic a carcinoma.

It is the benign stromal proliferation associated with perivascular lymphocytic collections that can form a mass within the breast of diabetic patients, including male diabetics.

The pathogenesis is multifactorial like uncontrolled diabetes mellitus and role of HLA associated autoimmune conditions are also studied.

They may present as a palpable hard breast lump. Ultrasound shows ill defined solid heterogeneous mass lesion suggesting a malignant mass. Mammography and MRI also shows the findings similar to a breast carcinoma.

### CONCLUSIONS

All malignant looking breast masses are not always malignant. Lymphocytic mastitis or Diabetic mastopathy is an under looked condition in India.

Though it is a benign pathology, they largely present with malignant features on imaging studies. Diagnosis is by histopathological correlation.

Therefore, the knowledge about this condition is very important for practising radiologists and clinicians.

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