

### Lymphocytic mastitis presenting as breast abscess

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#### ABSTRACT

Lymphocytic mastitis is an uncommon fibro-inflammatory breast disease, found in association with some auto-immune disorder e.g Type 1 diabetes, rheumatoid arthritis, Sjogren's syndrome etc. I am reporting a rare case of

lymphocytic mastitis in a 25 year old Indonesian patient with involvement of one breast and having no known underlying risk factors. (Rawal Med J 2014;39:354-355).

**Key words:** Lymphocytic mastitis, breast abscess, autoimmune disorder.

#### INTRODUCTION

Lymphocytic mastitis is a rare benign fibro-inflammatory breast disease, usually found in association with auto-immune disorders e.g. Type 1 diabetes, rheumatoid arthritis or Sjogren's syndrome.<sup>1</sup> It is also known as diabetic mastopathy, affects young to middle aged females, involving one or both breasts.<sup>2</sup> The resolution is slow, taking several weeks to months and may be incomplete. Reassurance to the patient is important and role of antibiotics is not very clear.<sup>3</sup>

#### CASE REPORT

A 25 years old Indonesian patient presented in the outpatient department with history of painful swelling of right breast of 6 weeks duration. It started as a small painful lump in the upper medial quadrant at 2 o'clock position associated with fever. The fever subsided over the next few days with the use of anti-pyretic (self-medication). The swelling continued to increase in size and spread to the upper outer quadrant. She noticed that there were multiple painful nodules and the overlying skin felt warm with red discoloration. In the last two days, she also noticed some redness and swelling of her left foot and ankle. Past medical history was insignificant. She was married with 2 children. Her family was in Indonesia and she was working as a housemaid. Physically, she was of average built, well-nourished with rough hands, vital signs were normal. Her left ankle and foot was edematous, warm with intact circulation and mildly tender to touch with no physical disability. On local examination of the breasts, the left breast was normal, but the right breast was swollen, skin red and warm with

tenderness over most of the breast tissue. Axillary lymph nodes were not palpable. Provisional diagnosis of nonpuerperal breast abscess was made. Breast ultrasound showed fluid with debris, with multi-loculated cavities; some were inter-communicating. With ultrasound guided needle aspiration, 100cc of thick yellow pus was obtained. The swelling subsided but there were still some remnants of firm to hard nodules. She was placed on co-amoxiclav 625mg 8 hourly and paracetamol 1gm 8 hourly. After 48 hours of antibiotics, there was recollection of fluid. Keeping in mind its multiloculation and residual nodules, open drainage and biopsy was done. Three samples of pus failed to show any aerobic or anaerobic growth.

Histopathology of breast tissue revealed profound lymphocytic infiltration, mostly peri-ductal and multinucleated giant cells with no evidence of malignancy and diagnosis of lymphocytic mastitis was made. The lab investigations showed Hb 11.6g/dl, Hct 37, WBC 14.33/cmm, PT & APTT and INR ratio within normal range, and so were urea, creatinine and fasting blood glucose. Within 48 hours the swelling and redness of the left ankle and foot resolved. She was kept on the antibiotics for 10 days. The swelling of breast regressed and became pain-free but multiple firm nodules persisted over the coming months with gradual decrease in size. She was reassured in the follow-up visits. In the last visit (nearly 8 months after her initial presentation) the nodules had markedly decreased in size and the axillary lymph disappeared. Fasting blood glucose levels were repeated twice in the follow-up visits, and they were within normal range.

## DISCUSSION

Lymphocytic mastitis is a benign disease affecting young to middle aged females.<sup>3,4</sup> Clinically, the patient may present with solitary or multiple discrete firm to hard nodules in one or both breasts. The lymphoid infiltrates are predominantly B cells.<sup>4,5</sup> Few cases in the literature which were followed did not appear to be associated with increased risk of subsequent development of lymphoma.<sup>6,7</sup> Lymphocytic mastitis was first reported in 1984 as presence of fibrous breast lumps in Type 1 diabetes mellitus.<sup>8</sup> Whether lymphocytic mastitis proceeds on and presents as a frank abscess, as in this case, has not been reported in the literature. In differential diagnosis one has to consider various other conditions like chronic breast abscess.<sup>1</sup> Culture frequently reveals mixed flora (staphylococcus aureus and streptococcal species) and anaerobic micro-organisms.<sup>9</sup> Inflammatory breast cancer is a rare, rapidly developing lesion and the affected breast appears red, swollen and tender with involvement of the whole breast.<sup>2,4</sup> Distinction from carcinoma of the breast may be difficult clinically and by mammogram,<sup>2,7</sup> but histological examination will settle the diagnosis of lymphocytic mastitis.<sup>6,10</sup> The recurrence rate of lymphocytic mastitis is 30-35%.<sup>4,5</sup>

In conclusion, Lymphocytic mastitis is a rare benign fibro-inflammatory breast lesion occurring in young to middle aged females, can also occur in isolation and may present as breast abscess. Resolution

requires several months and therefore it is important to have a tissue diagnosis.

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