Clinical Presentation of Primary Actinomycosis of the Breast

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Primary actinomycosis of the breast was revealed in a young 30-year old woman without any history of breast disease, complaining of sudden painful and swollen left breast for a few days. Bilateral low dose mammogram demonstrated bilateral dense breast with asymmetrical increased density of the left breast (Fig. 1). Severe arthralgia in all her joints especially knee joints as well as severe more painful breast were the major complains after open biopsy of her left breast, and postoperative sonography showed multiple heterogeneous necrotic foci (Fig. 2). Moreover, collec-

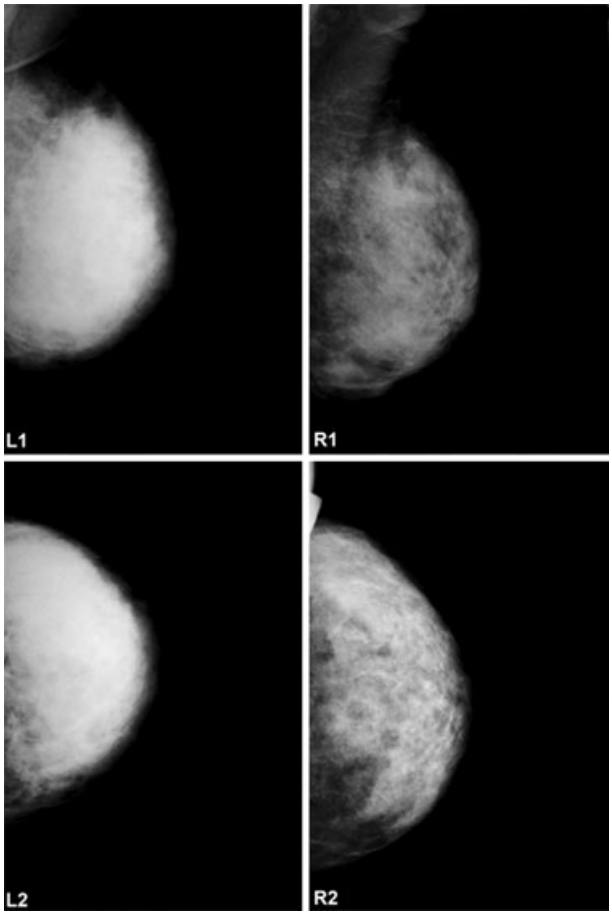

Figure 1. Mediolateral and craniocaudal mammogram of primary breast actinomycosis shows augmented density of the left breast (L1,L2) compared with contralateral breast (R1,R2).

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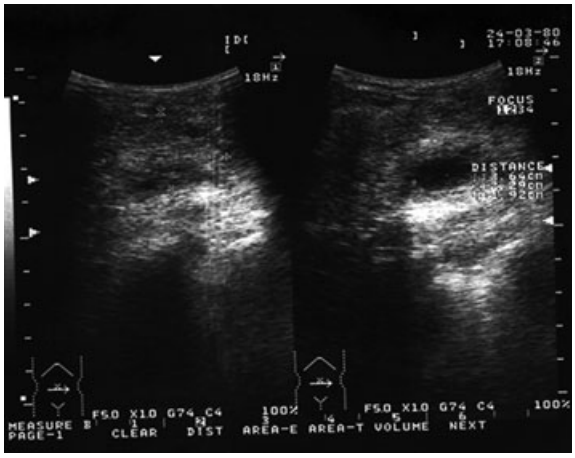

Figure 2. Sonography of primary left breast actinomycosis with necrotic foci.

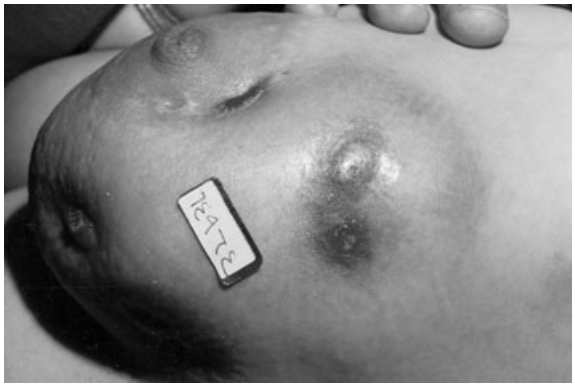

Figure 3. Breast lesions due to *Actinomyces israelii* presented fistulas draining to the skin.

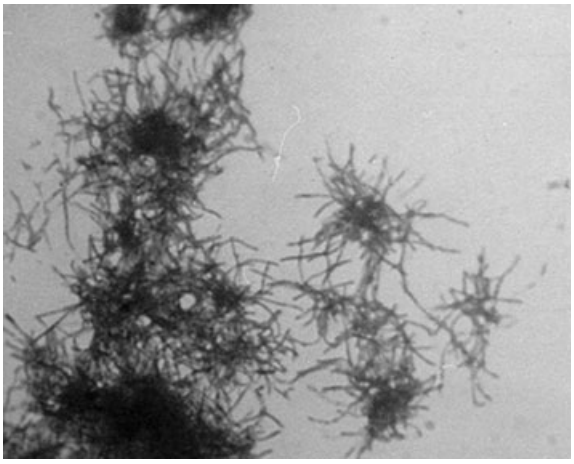

Figure 4. Branch filaments of *Actinomyces israelii*. Gram stained (×1000).

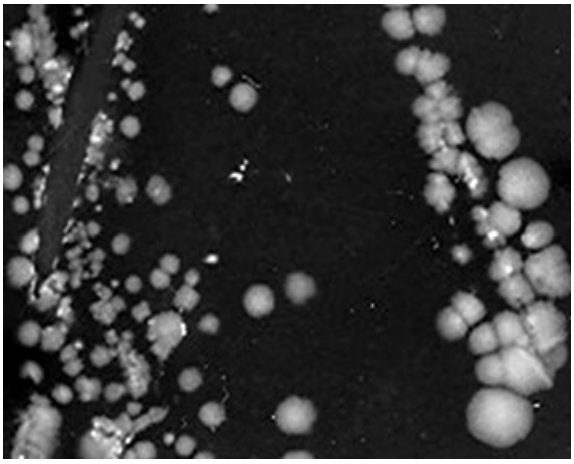

Figure 5. Colonies of *Actinomyces israelii* on BHIB at 37°C.

tion fistulas draining to the skin were seen on appearance (Fig. 3). Finally, the diagnosis of breast actinomycosis was confirmed by direct examination on aspirated material with 10% KOH, Gram and Kinyoun stained smear and anaerobic culture (Figs. 4 and 5). After confirmation of breast actinomycosis, the patient responded well to the treatment with erythromycin (800 mg 4 times a day) for 6 months and is doing well.

Breast actinomycosis is very rare and only a few cases have been reported so far. The most important point in this case that is different from other reported studies is particular clinical presentation such as arthralgia which guided our thought towards the probable link between the disease and patient's immune response. Clinicians should be aware of such presentation so as to prevent misdiagnosis.

Breast Cancer and Multiple Myeloma at Initial Presentation

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A 56-year-old obese woman presented to the surgical outpatient clinic with a right breast mass of 1 year duration. The patient was complaining of left thigh pain for the last 6 months prior to her presentation. Right breast examination revealed peau d' orange with a 3 × 3 cm mass. The rest of her examination was normal except for tenderness over the left lower thigh. ESR was raised at 72 mm/hour. Her alkaline phosphatase was elevated at 155 IU/L (normal 26–88).The patient had a high total protein of 84 g/L (normal 63–80) with normal serum calcium levels. CA 15.3 was normal at19.5 U/mL (normal <40).

Ultrasound and mammogram of both breasts revealed a 3.7 × 2 cm dense lobulated lesion with spiculated margins extending from the mass up to the retro-areolar region with skin thickening (Fig. 1). A

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