

## Short Communication

# Actinomycosis of Breast

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A 45 years old woman underwent right sided mastectomy and chemotherapy for infiltrating ductal carcinoma. Now the patient presented with skin changes in left breast resembling peau-de-orange. No lump was palpable in the breast; however, a mass was felt in left axilla measuring about 4x5 cm. Patient underwent left sided modified radical mastectomy with axillary clearance with the clinical suspicion of left sided carcinoma breast.

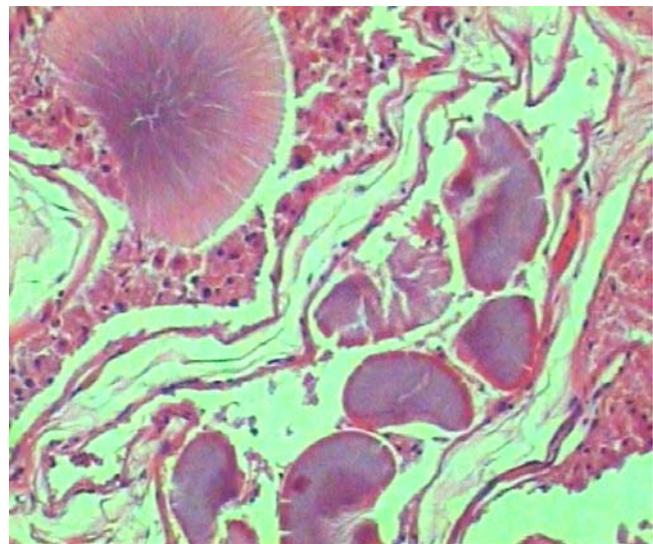
Gross examination revealed mastectomy specimen with axillary tail. Thorough sectioning was performed; however, no tumor could be identified grossly. 11 lymph nodes were recovered from axillary tail, ranging in size from 1 cm to 4 cm. Cut surface of lymph nodes was whitish. H&E stained sections of the breast didn't reveal any tumor. Only few foci of atypical ductal hyperplasia were identified. An interesting finding was presence of Actinomycosis colonies with Splendour-Hoepplei phenomenon inside ducts. Giant cell reaction and neutrophil infiltration was seen around colonies. All of the lymph nodes revealed tumor metastasis most probably from the other breast.

Twenty-nine previous cases of primary actinomycosis of the breast have been published.<sup>1</sup> Primary actinomycosis of the breast have been reported in patients who presented with a lump, clinically simulating malignancy. This condition should be considered in the differential diagnosis of intractable breast abscess and malignancy as actinomycosis can be treated by timely diagnosis, limited surgery, and effective antibiotic therapy.<sup>2</sup>

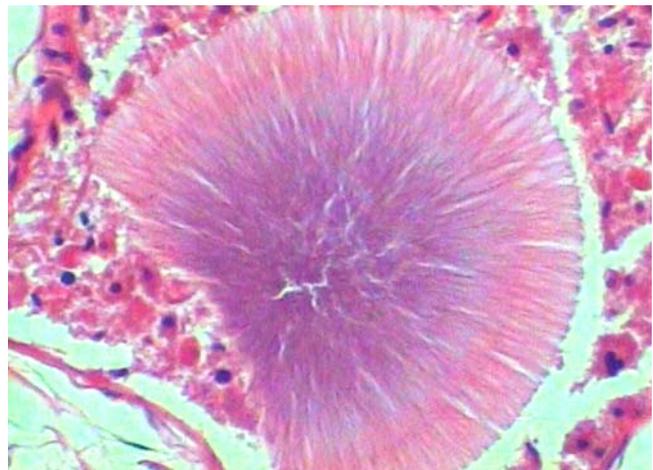
## References

1. Capobianco G, Dessole S, Becchere MP, Profili S, Cosmi E, Cherchi PL et al. A rare case of primary actinomycosis of the breast caused by *Actinomyces viscosus*: diagnosis by fine-needle aspiration cytology under ultrasound guidance. *Breast J.* 2005; 11(1):57-9.

2. Jain BK, Sehgal VN, Jagdish S, Ratnakar C, Smile SR. Primary actinomycosis of the breast: a clinical review and a case report. *J Dermatol.* 1994;21(7): 497-500



**Splendour Hoepplei Phenomenon in a Breast Duct (H&E 200X)**



**Typical Sun Ray Appearance of Actinomycosis**

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**seen in a Breast Duct (H&E 400X)**