

## Case Report

### Surgical misadventure: A case for thoughtful patient preoperative assessment

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#### Abstract

Breast abscess is a common problem in women particularly in lactating women in Tropical Africa. Occasionally a chronic breast abscess may mimic carcinoma of the breast. This is a case presentation of a 45-year old woman who presented with a 1year history of progressively increasing right breast swelling associated with enlarged axillary lymph nodes. It was diagnosed breast cancer and patient had a radical mastectomy in a peripheral hospital. Histology of the specimen however revealed a chronic breast abscess with granulation tissue formation,extensive fibrosis of the surrounding breast tissue and nodal hyperplasia. Patient recovered uneventfully and was discharged home. An assessment of the psychological impact of losing a breast in this patient was not possible as patient was lost to follow up. Optimal clinical examination by the surgeon and preoperative cytological diagnosis would ensure that the patient is spared unnecessary mutilating surgery.

#### Introduction

Breast abscesses are common problems worldwide and particularly in Tropical Africa. The incidence of breast abscess in lactating women in most developing countries is high.<sup>1</sup> Abscesses are caused by bacterial and non-bacterial infections of the breast tissues. Occasionally, a chronic breast abscess may mimic cancer clinically.<sup>2</sup>Routine fine needle aspiration cytology should be done as part of the initial work up of a patient with a breast mass to avoid mutilating surgery (mastectomy) for a benign breast disease.

#### Case Report

45-year old woman presented in a peripheral hospital with a 1year history of an increasing right breast swelling and associated axillary lymphadenopathy. A diagnosis of carcinoma of the breast was made and she had a radical mastectomy. The surgical specimen was sent to the histopathology laboratory for histological assessment. It was evident from the referral notes that the patient did not have a preoperative cytological diagnosis. There was also paucity of clinical information on the referral notes. We received the surgical specimen in our laboratory in 10% formalin. It weighed 415g. Grossly, the overlying skin showed peau d'orange, thinning of the areolar skin and an induration beneath an intact nipple. The nipple was not retracted and there was no skin ulceration. Cut sections showed gray, yellow areas and a central cystic cavity containing 5mls of

pus and enlarged lymph nodes. Histological sections were processed in paraffin wax and stained with haematoxylin and eosin. Histology revealed a large area of abscess cavity rimmed by granulation tissue and extensive fibrosis of the surrounding breast tissue. Other areas showed normal residual breast tissue.The lymph nodes showed reactive hyperplasia only. There was no evidence of malignancy in both the breast and lymph nodes sampled. Discussion Chronic breast abscesses may mimic cancer and need meticulous clinical assessment and preoperative cytological diagnosis. To the best of my knowledge, this is the first case of a chronic breast abscess, a benign lesion subjected to a radical mastectomy. The incidence of a chronic breast abscess developing in women with mastitis is estimated at 3% to 11% by several reports.

The usual presentation is of a painful erythematous subareolar or periareolar mass in a female within the reproductive age. Mammary duct rupture during lactation is an important predisposing cause however it may occur independent of lactation.<sup>4</sup> Breast manipulation and transfer of bacteria from other body parts may also play a role in the aetiology of breast abscesses. Over 90% of non-lactational breast abscess is associated with smoking and staphylococcus aureus is the common cause.<sup>5</sup> Breast abscess may also be caused by other microorganisms such as fungi and

streptococcal microorganisms. Incision and drainage and antibiotics usually treat breast abscesses. Chronic Abscesses may be excised.<sup>6</sup> Due to the similarity in clinical signs such as redness, peau d'orange, skin and nipple retraction and axillary lymphadenopathy, a breast abscess should be kept as a differential diagnosis for a breast mass especially in developing countries. Clinical examination and history taking is not enough to differentiate between these two lesions. A fine needle aspiration cytology should be done routinely for any breast mass.

## Conclusion

A preoperative fine needle aspiration cytology should be mandatory for any patient with a breast mass. Thorough clinical examination by the Surgeon and preoperative cytological diagnosis would ensure that

patients are spared unnecessary mutilating surgery for a benign breast disease.

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