Co-existence of Breast Carcinoma along with Tuberculosis of the Bilateral Axillary Lymph Nodes : A Rare Case Report

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Abstract :

Background: One of the first reported cases of the coexistence of breast carcinoma with tuberculosis of the axillary lymph nodes were in the 1800's by Pilliet and Piatot.[1-3] No literature states any link that suggests an evidence of tuberculosis being carcinogenic[4]. But the existence of tuberculosis can occur in cancer due to lowered immunity. World-wide only a few number of cases have been recorded up till now. We are presenting a rare case of 65 year old female who was operated for Ca breast and was diagnosed with axillary tuberculosis.

Conclusions: Cancer and tuberculosis having a similar generalized appearance, a histology suspicion of calcifications in the lymph nodes should raise a possibility of tuberculosis even in absence of a history of contact with tuberculosis.

Keywords: Breast Cancer, Tuberculosis of Axilary Lymph nodes

Introduction :

Cancer and tuberculosis individually are the most common causes of mortality and morbidity, and a major public health care problem in the world. A lot of literature describes the co-existence of cancer and tuberculosis. Malnutrition and compromised immunity resulting from local or systemic effects of cancer are likely to have a role in TB infection or re-activation.[5,6]

Tuberculosis is an important risk factor in cancer. Cancer can co-exist with tuberculosis either as tubercular mastitis or as tubercular lymphadenitis.[7] Re-activation of latent tuberculosis can occur due to immunosuppression that occurs during cancer or during chemotherapy exposure.[8]

Case Report :

A 65 year old female came with chief complaints of lump in the right breast since 12 months. It was a hard lump 5x5cm in the upper outer quadrant of the right breast, fixed to the breast tissue but not to the underlying structures. Diagnosed clinically as carcinoma breast. Patient was investigated for the same by sono-mammography with findings suggestive of a lobulated mass showing mildly raised internal vascularity, 2-3 hypo echoic structures noted traversing from the lesion to nipple area not taking vascularity. Findings suggestive of neoplastic etiology (?ductal origin) with axillary lymphadenopathy with maintained fatty hilum between them and histopathology was infiltrating ductal carcinoma in-situ as suggested by the reports of a true-cut biopsy. The pre-operative laboratory findings were unremarkable. A modified radical mastectomy along with ipsilateral axillary dissection was then planned as a curative procedure for the patient. The specimen of excised breast tissue was then sent for histopathology which revealed high grade infiltrating duct adenocarcinoma of breast associated with evidence of tuberculosis in ipsilateral axillary lymph node.**(Fig 1& 2)**

Primary tuberculosis elsewhere was not identified and the classic signs of tuberculosis such as evening rise in temperature and/or weight loss were also absent. The contralateral axilla was then tested by fine-needle aspiration for evidence of tuberculosis which then turned out to be positive.

Four drug anti-Koch's treatment (AKT) had been started immediately after surgery. Patient was followed up regularly and it was observed that the wound started healing adequately within one month of starting AKT.

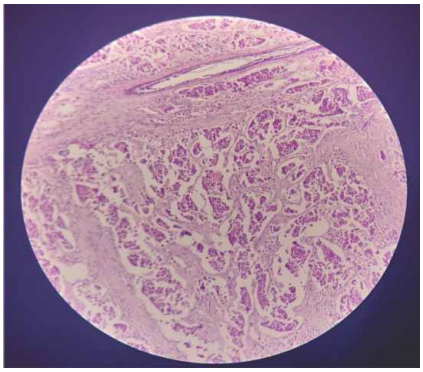

Fig 1 : Adenocarcinoma of Breast

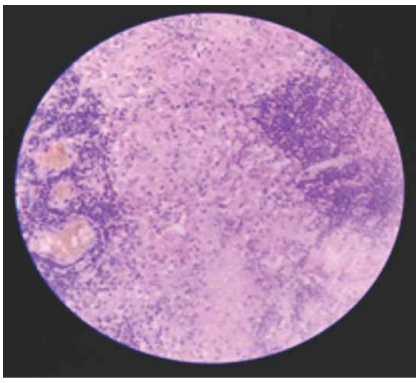

Fig 2 : Non-caseating granuloma in axillary LN

Discussion :

Tulasi et al, studied about five cases within coexistence of axillary tuberculosis along with breast cancer was diagnosed, their study concluded co-existence leads to overstating, mislead management and hence poor patient compliance as to receiving two major treatments simultaneously.[2] The incidence of breast cancer and tuberculosis co-existing have been described in about a 100 cases, however its coexistence with axillary lymph node is rare. Only about seven cases have been recorded in literature so far.[9] In our present study, our aim is to highlight the rarity of this co-existence, the importance of early diagnosis and hence their management.

Conclusion :

Difficulty arises when the coexistence of tuberculosis leads to over-staging of breast cancer, when the fear of reactivation of tuberculosis leads to over prescription of tubercular drugs or when there is a fear of ill compliance. A histology suspicion of calcifications in the lymph nodes should raise a possibility of tuberculosis even in absence of a history of contact with tuberculosis. This could hence lead to a better plan for management which is prudent when it comes to follow-up and a successful outcome.

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