



ORIGINAL RESEARCH PAPER

General Surgery

CO-EXISTING TUBERCULAR AXILLARY LYMPHADENITIS WITH CARCINOMA BREAST CAN OVERSTAGE THE DISEASE -CASE REPORT

KEY WORDS: Axillary tubercular lymphadenitis, Carcinoma breast.

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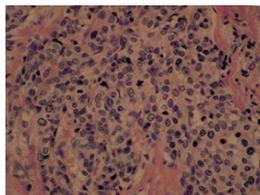
ABSTRACT **Summary:** The synchronous occurrence of tuberculosis and carcinoma in breast is unusual. The simultaneous occurrence of both the diseases can complicate the neoplastic disease. The diagnosis and treatment of tuberculosis in a patient with cancer assumes importance as it can prevent high mortality in patients with co-existent disease and thereby create problems in treatment decision. Axillary lymph node enlargement in breast cancer patient is not always caused by metastatic tumour of the breast even in the ipsilateral axillary nodes. We present here one case report as an example of tuberculous axillary lymphadenitis co-existing with invasive ductal carcinoma of the breast. Accurate diagnosis has helped in down-staging carcinoma of the breast and also in identifying curable disease.

INTRODUCTION

Extrapulmonary Tuberculosis (TB) constitutes about 15 to 20 per cent of all cases of tuberculosis with lymph nodes being the most common site of involvement. 1 Co-existing TB with carcinoma has been previously reported in most organs, especially with lung cancer. 2 The synchronous occurrence of tuberculosis and carcinoma in breast is unusual and the literature includes single case reports 3-9 probably due to the declining incidence of TB in the West. The simultaneous occurrence of both the diseases in breast can complicate the neoplastic disease and thereby create problems in treatment decision.

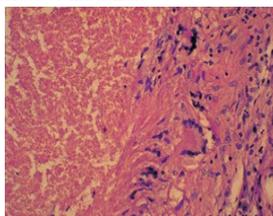
CASE REPORT

A 50-year-old female underwent Modified Radical Mastectomy in Rajiv Gandhi government general hospital in January 2020 for a lump right breast after initial diagnosis of carcinoma breast. On investigations, she had multiple palpable axillary lymph nodes on the same side, and was clinically staged as T2N1. Histopathological examination of the MRM specimen revealed a tumour of size 3.5x3x2.5cm showing features of Infiltrating Duct Carcinoma (IDC) . From the 22 axillary lymph nodes studied, ten showed features of TB with caseating granulomas and none showed any evidence of metastasis. The pathological staging finally reported was T2N0.



Infiltrating duct carcinoma breast, H and E X4

This case didn't had primary mammary or pulmonary tuberculosis. This case received chemotherapy followed by a complete course of ATT. The case is being followed till date and show no evidence of disease.



Classical caseating tubercular granuloma in an axillary

lymph node. H and E

DISCUSSION

The association of tuberculosis and cancer has been recorded in most of the organs and has coexisting tuberculosis. Highest prevalence was seen in patients with Hodgkin's disease (96/10,000 cases) followed by lung cancer (92/10,000), lymphosarcoma (88/10,000) and reticulum cell sarcoma (78/10,000). Among 14,742 cases of breast reviewed by them, only 28 had co-existing tuberculosis in breast, a prevalence of 19/10,000.

The clinical situations that arise are the presence of carcinoma and tuberculous mastitis, carcinoma in the breast with axillary tuberculous adenitis or both. Our case had carcinoma breast with axillary tuberculous adenitis without any primary mammary or pulmonary TB.

Co-existence of two diseases in one organ is always a diagnostic and therapeutic challenge. This can create a dilemma in diagnosis and treatment as there are no pathognomonic symptoms or signs to distinguish both diseases. Most decisions in the management of breast cancer are taken based on TNM staging of the tumours. While both carcinoma of the breast and tuberculosis (TB) are common in developing countries, their co-existence in the breast is rare which can lead to overestimation of the tumour size, and therefore, these patients lose the opportunity for breast conservation due to this. Presence of palpable axillary nodes, which may be due to tuberculous lymphadenitis, also leads to the overstaging of nodes. Treatment compliance, which is a major problem in developing countries, may be a problem when two major diseases are being treated. In the above patient discussed, the synchronous presence of axillary TB led to clinical overstaging of malignancy based on which the management decisions were taken.

CONCLUSION

The co-existence of TB and carcinoma requires a high index of suspicion for diagnosis, concomitant treatment of both diseases, and counselling of patients to ensure compliance. Axillary lymph node enlargement in breast cancer patients is not always metastatic disease. We have described a case of co-existence of carcinoma in breast and an ipsilateral enlargement of axillary lymphnodes caused by tuberculosis. Accurate diagnosis has helped us in down-staging the disease and also identifying curable disease which helped in

modifying the treatment protocol. The diagnosis and treatment of tuberculosis in a patient with cancer assumes importance as it can prevent high mortality in patients with co-existent disease.

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