



Case Report

Tuberculosis of the Breast: A Case Report

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Abstract

A middle aged woman presented with a lump and discharging sinus in her breast. On first look, the lesion seemed to be a carcinoma of breast. The patient got enlarged axillary lymph nodes with fever in the evening, night sweating and loss of weight, indicating the lesion to be of tuberculous in origin. FNAC indicated the lesion to be tuberculous but open biopsy was advised by the pathologist for confirmation. Excision biopsy of the lesion confirmed the lesion as tuberculous. Treatment with anti-tuberculous drugs cured the disease. A lump in the breast with skin involvement and axillary lymph node enlargement may be considered a malignant tumour on first sight, but tuberculosis cannot be ruled out, especially if a sinus is present along with systemic manifestations of the disease.

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Introduction

Tuberculosis is a worldwide problem with high incidence in endemic areas such as Indian sub-continent, East Asia and Africa². As the incidence of tuberculosis increased even in some industrialized countries, an increase in extra-pulmonary involvement of the disease can be expected. Tuberculosis of breast is an uncommon condition^{3,5,9}. If a patient comes with a breast lump along with axillary lymph node enlargement, the clinician first considers it to be a malignant tumour^{6,7,8}. Careful history taking may unveil the systemic manifestations of tuberculosis. Ulcer over a malignant tumour indicates skin involvement by the tumour. If the ulcer is having undermined edges and particularly, if a sinus is present in addition, tuberculosis should be considered⁴. FNAC of the lump can give valuable

information about the nature of the lesion but biopsy of the lesion may be necessary to confirm the diagnosis, especially if the pathologist who did FNAC, is in doubt about the exact nature of the lesion⁵. Treatment with commonly used recent combinations of anti-tuberculous drugs for 6 months, will cure the disease^{1,11,12}.

Case report

A middle aged woman from Meherpur district came to me with a lump in her left breast with ulceration of overlying skin, in March, 2006. The lump first appeared as a small boil in upper and outer side of her left breast about 6(six) months back. It refused to heal inspite of treatment given by the local doctors. It was increasing in size day by day and began discharging pus at intervals. Gradually, skin around the site of discharge

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became discolored, sloughed out and ultimately an ulcer with overhanging margins developed at that site.

She lost about ¼th of her body weight in 6 months time. She gets easily tired on physical exertion since 6 months. She feels mild rise of body temperature from afternoon which subsides at late hours of night with sweating, for about 6 months. She got no cough. Her bowel habit was normal with normal stool color all the time. Micturition is normal with normal urine color. Her menstruation is normal with regular monthly cycles of 3-4 days period with normal flow without any offensive odor. She gave history of no other illness and stated that she could work all day without being tired before starting of the disease.

She is the mother of 2 sons and 3 daughters and uses oral contraceptive pills regularly since 3 years. Age of last child, the youngest son is 3 years who often suckles along with feeding with cow's milk.

On examination, a lump in upper and outer quadrant of left breast with an overlying ulcer on skin, not extending beyond the lump and an area of discoloration around the ulcer is detected. The lump is 6 cm. in diameter, slightly movable, tender on deep pressure and exudes thin pus on pressing, through a sinus in the middle of the skin ulcer. Skin over the lump along with the discolored area is adherent with the lump⁹.

Some matted lymph nodes in the anterior group of left axillary lymph nodes were palpable. Other groups of axillary and supra-clavicular lymph-nodes were not palpable. No other lymph nodes in her body were palpable. No abnormality was detected in her right breast and right axilla.

The patient was not anemic, not cyanosed and not jaundiced. Her vital signs were within normal limit. Her gait was normal. She was quite normal mentally.

Her heart and lungs were normal clinically. No abnormality was detected in her abdomen clinically. Her spine along with both upper and lower limbs were normal.

Investigations

Blood

Total count of W.B.C.was 9,600/C.mm. Neutrophil 55%, Lymphocyte 40%, Monocyte 04%, and Eosinophil 01%. Haemoglobin 12.3 gm/dl (76%). E.S.R.was 90 mm. in 1st. hour by Westergreen method. Serum Creatinine was within normal range.

Urine

Contained trace albumin, some calcium-oxalate crystals, 1-5 epithelial cells and 0-3 pus cells. No reducing substance was present. No R.B.C. was present.

X-ray chest

No abnormality was detected in her chest x-ray.

Fine Needle Aspiration Cytology (F.N.A.C.) from the lesion-

Showed granulomatous inflammatory lesion, possibly of tuberculous origin. Open biopsy is recommended.

Sinogram was not advised for fear of spreading infection. Finally, a decision was taken to excise the lesion under an antibiotic (Cephadrine) cover and to put it for histopathological examination.

Operation

Under general anesthesia, a probe was introduced into the sinus track over the lump in left breast. An elliptical incision was made encircling the lump with a margin beyond the undermined skin which was extended laterally into the left axilla. The involved skin with the whole mass underneath along with involved lymph-nodes in left axilla were dissected out in one block. Hemostasis secured and the wound closed with a suction drain. The drain was removed on 5th Post-operative day. The wound healed primarily and all stitches were removed on 10th Post-operative day and the patient was discharged from the clinic.

Histopathology of the excised lesion confirmed the diagnosis of Tuberculosis of the breast and of the axillary lymph nodes.

The patient was prescribed anti-tuberculous drugs, 4 drugs regimen for first 2 months. After treatment, the lesion healed with minimum of scar tissue and showed no signs of recurrence.

Next 4 months treatment with 3 drugs completely cured the condition.

The patient is completely free from any breast or axillary lump. She got no fever and has gained 8 Kg. body weights in 6 months. She does not become easily tired on exertion and can do all her house-hold works now.



Figure 1: Breast & axillary lump.

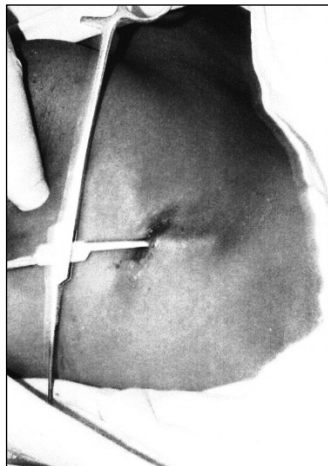


Figure 2: Ulcer with undermined edge



Figure 3: Excised breast lump & axillary lymph nodes.



Figure 4: Healed site of operation

Discussion

Tuberculosis of breast, though an uncommon disease, but is not rare in our country where pulmonary, intestinal and skeletal tuberculosis pose a major health hazard. A breast lump with a sinus along with systemic manifestations of tuberculosis should be suspicious of tuberculosis. FNAC (an USG-guided FNAC is better), a very simple investigation, can lead the clinician to the correct diagnosis, which may have to be confirmed by biopsy especially if the pathologist is in doubt about the diagnosis.

Whether the condition can be treated with anti-tuberculous drugs on the basis of FNAC report alone, is a matter of controversy. FNAC is not a confirmatory diagnosis and it should have to be confirmed by histopathological examination of the lesion. It is particularly true when treating a disease like tuberculosis where potentially dangerous drugs are used. Therapeutic trial with anti-tuberculous drugs is better avoided.

The source of infection should be searched for¹⁰. No other member of the patient's family was suffering from tuberculosis. Primary infection of her lactating baby's throat with infected cow's milk, who during suckling may infect the patient's breast, can be a probability. But none of her children is suffering from tuberculosis. Her youngest son often suckles her breast along with feeding with cow's milk, is not a tuberculous patient but it can be argued that he might have been suffering from tuberculosis previously and has cured spontaneously by his own body defense after infecting the mother's breast. Another

possibility is that, after an infected cow's milk feed, the child immediately suckled his mother's breast and the breast was infected with tuberculosis and the child was not infected due to his own body defense.

The patient herself may have primary pulmonary, intestinal or neck gland tuberculosis and blood-borne infection of the breast occurred and the primary site of infection has got spontaneous cure by body defense may be a very weak argument.

Infection of an abrasion or a cut wound on the breast and air-borne infection of that site may a probability. Prevalence of tuberculosis in that locality should be surveyed by government or social organizations and facilities for prompt treatment of detected cases - whether pulmonary or extra-pulmonary, should be available in that area.

Conclusion

Mammary tuberculosis is still a not uncommon disease in our country. Careful history taking and physical examination along with FNAC will lead to the diagnosis. If still in doubt, biopsy of the lesion will confirm the diagnosis. Standard anti-tuberculous chemotherapy will cure the disease^{11, 12}. Search for endemicity of the disease should be carried out in that region and proper preventive measures adopted to control the disease.

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