

A Rare Presentation of Primary Breast Tuberculosis in a Primigravida: A Case Report

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ABSTRACT

Tuberculosis is an endemic and very common disease in India. Breast tuberculosis is often confused with breast malignancy or pyogenic abscess. We report a rare case of breast tuberculosis which is successfully managed with Anti-tubercular drugs. After six months of compliant treatment patient delivered a healthy baby.

Key Words: *Anti-tubercular treatment, Breast abscess, Breast Tuberculosis*

INTRODUCTION

Tuberculosis (TB) is one of the major public health problem in India carrying 30% of total victims of the world. The disease is affecting mainly the young and in the era of Human Immunodeficiency Virus (HIV) it has become an Acquired Immunodeficiency Syndrome (AIDS) defining disease. TB has caused increase in the mortality & morbidity and infertility in the females and is responsible for poor pregnancy outcome in the pregnant females.^[1] Breast tuberculosis is very rare entity and an exact incidence in India is not known however its incidence in the western world is considered to be less than 0.1% of all the breast lesions.^[2] The breast TB affects mostly the young females as the breast tissue undergoes changes during reproductive years making it more vulnerable to trauma and infection of the dilated ducts.^[3] The reporting of breast TB is often confused with breast malignancy or pyogenic abscess.

CASE REPORT

We report a 23 years primigravida in her first trimester presented with a painful swelling over the right breast for 7 days. There was history of throbbing pain with high grade fever for first two days. There was no history of cough, hemoptysis or evening rise of temperature. Family history was insignificant regarding tuberculosis, diabetes and hypertension. The patient did not complaint of anorexia or weight loss. The patient was negative for HIV test and other blood transfusion related diseases.

On examination, there was a swelling mainly in the sub-areolar region of the right breast approximately 3x3 cm in size. There was no axillary lymphadenopathy. The pus was aspirated with a wide bore needle and sent for Acid Fast Bacilli (AFB), Gram's stain, Culture and sensitivity examination. Treatment was started with oral antibiotics thereby, initially the patient improved, but the lump did not vanish completely. The AFB were seen in the pus and subsequently confirmed by culture which showed sensitivity to the first line drugs. The patient was started on Anti-Tubercular treatment (ATT) and completed the therapy for six months and delivered a healthy child.

DISCUSSION

Breast tuberculosis is very rare and in India its incidence reported to be in between 0.64%-3.54%.^[4] The breast tissue is considered resistant to tuberculosis. Tuberculosis of the breast can be primary or secondary. The primary involvement of the breast is very rare but the secondary involvement is known to occur from the tubercular focus somewhere else in the body through blood, lymphatics, from the adjoining ribs, direct implantation, or the ductal infection. Among these the centripetal spread from the axillary lymph nodes is the most widely accepted route of spread. Breast tuberculosis has been classified into Nodular tubercular mastitis, Disseminated or confluent tubercular mastitis, Sclerosing tubercular mastitis, Tuberculous mastitis obliterans and Acute miliary tubercular mas titis.^[5] TB is believed to get flared up by the stress of pregnancy, especially in association with a poor nutritional status, immuno-deficient state, or co-existent diseases. The most common presentation of the breast TB is a painful lump. However it can also present as breast abscess, an ulcer, a pus discharging sinus. Besides this the

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constitutional symptoms like weight loss, evening rise of temperature, cachexia, anorexia and cough may or may not be present. Peau d' orange is often seen in patients with extensive axillary nodal tuberculosis hence it may be confused with carcinoma breast.^[6] The diagnosis of breast tuberculosis is difficult however its diagnosis by Ultrasonography of the breast is cheap, easily available and a good modality to identify the abscess or the lump and guide the FNAC to establish the histo-pathological diagnosis. Mycobacterial culture remains the gold standard for diagnosis of tuberculosis however the techniques to hasten the diagnostic yield have increased over a period of time. Gene amplification methods like PCR developed for the diagnosis of tuberculosis are highly sensitive especially in culture-negative specimens.^[7] The treatment of breast tuberculosis involves ATT mainly and sometimes surgery where there are multiple sinuses or lumps with the extensive involvement of the axillary lymph nodes or residual lump after the treatment. Breast tuberculosis can be treated with 6 months regimens of ATT comprising two months of intensive phase treatment with 4-drug combination followed by a continuation phase of 4 months with 2-drug combination. The first line drugs used for the treatment of breast tuberculosis are ethambutol, streptomycin, rifampicin, isoniazid and pyrazinamide. The patients resistant to the first line drugs should be treated with the second line drugs. There are increased chances of prematurity and low-birth weight babies in women treated with ATT. These drugs are safe to the foetus except streptomycin which is ototoxic.^[8] Generally the prognosis is good for breast tuberculosis. In our case, we started ATT to the patient and the swelling starts subsiding in the due course of the time. The patients responded well, took the drugs for six months continuously and delivered a healthy baby.

CONCLUSION

The primary tuberculosis of the breast is very rare and by our case we advocate that timely diagnosis and compliant treatment with appropriate anti-tubercular drugs ensures better maternal and foetal outcome.

REFERENCES

1. Getahun H, Sculier D, Sismanidis C, Grzemska M, Raviglione M. Prevention, Diagnosis, and Treatment of Tuberculosis in Children and Mothers: Evidence for Action for Maternal, Neonatal, and Child Health Services. *J Infect Dis.* 2012;205:S216-S227.
2. Kalac N, Ozkan B, Bayiz H, Dursun AB, Demirag F. Breast tuberculosis. *Breast* 2002; 11 : 346-9.
3. Kant S, Dua R, Goel M M. Bilateral tubercular mastitis. *Lung India* 2007;24:90-3.
4. Tewari M, Shukla HS. Breast tuberculosis: diagnosis, clinical features & management. *Indian J Med Res* 2005;122:103-110.
5. Alawad AAM. An insight into Breast Tuberculosis. *International Research on Medical Sciences* 2014;2(5):66-70.
6. Shinde SR, Chandawarkar RY, Deshmukh SP. Tuberculosis of the breast masquerading as carcinoma: a study of 100 patients. *World J Surg* 1995; 19 : 379-81.
7. Katoch VM. Newer diagnostic techniques for tuberculosis. *Indian J Med Res* 2004; 120 : 418-28.
8. Kumar P, Sharma N. Primary MDR- TB of the breast. *Indian J Chest Dis Allied Sci* 2003; 45 : 63-5.

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