Primary Tuberculous Mastitis

Summary of Case

A 32-year-old female presented with pus discharging sinuses on her right breast of 3 weeks' duration. Multiple pustules appeared initially which later opened up discharging nonfoul-smelling pus. There was no history of fever, mastitis, nipple discharge, breast or axillary lumps, and of contact tuberculosis (TB). Examination revealed multiple pus draining right breast sinuses, some showing healing with scarring [Figure 1a]. The surrounding skin was indurated with no underlying lump and axillary lymphadenopathy. The contralateral breast, axilla, bilateral supraclavicular fossa, and systemic examination were normal. A clinical differential diagnosis of ruptured breast abscess, granulomatous mastitis, and breast carcinoma was considered in that order.

Routine blood investigations, chest X-ray, sputum examination, and Mantoux test were normal. Pus sent for culture and sensitivity and acid-fast bacillus culture was negative. Mammogram done showed bilateral dense breast tissue with no lesions. A sinus wall biopsy performed and sent for GeneXpert was unremarkable hence excision of all the sinuses along with underlying induration was carried out. Histopathology showed chronic inflammatory and epithelioid cells, caseation necrosis, and Langhans giant cells that confirmed tuberculous mastitis [Figure 1b]. Postoperative antituberculous chemotherapy (isoniazid (INH), rifampicin, pyrazinamide, and ethambutol for 2 months followed by INH and Rifampicin for 6 months) was started. On follow-up at the end of 1 year, she has no systemic or local recurrence of the disease.

TB affects millions of people worldwide and is a great mimicker of various diseases, benign, and malignant alike.[1]

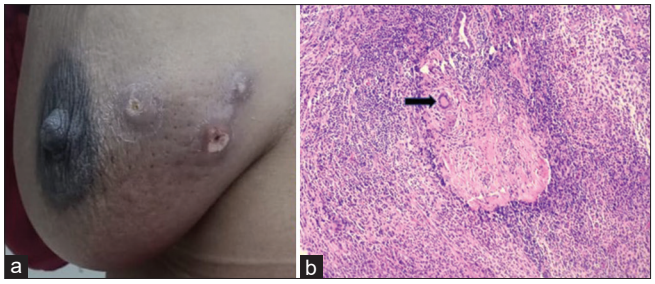

Figure 1: (a) Right breast with multiple sinuses; (b) Photomicrograph showing epitheloid cells, caseation necrosis and Langhan's giant cells (black arrow). H and E, ×40

Even though TB is primarily a pulmonary disease there has been a significant number of extrapulmonary TB cases reported. Tuberculous mastitis is a rare form of extrapulmonary TB affecting women from the Indian subcontinent with a reported incidence between 1% and 4.5%. As in our patient, when investigations show no primary TB focus elsewhere in the body, it leads to a diagnostic dilemma. A misdiagnosis of a chronic breast abscess or granulomatous mastitis or breast carcinoma, which all of these initially can present as a breast lump and later as multiple discharging sinuses with no specific findings on mammography and ultrasound to differentiate these diseases are usually thought of.[2] Fine-needle aspiration cytology might be inconclusive and pus culture might not grow the organism. Hence, a biopsy is required for a definitive diagnosis and to rule out these conditions as they can coexist and treatment strategy varies for different diseases.[3] TB mastitis usually responds well to conventional antituberculous chemotherapy, as in our patient.

Research Quality and Ethics Statement

The authors followed applicable EQUATOR Network (http://www.equator-network.org/) guidelines, notably the CARE guideline, during the conduct of this report.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient has given her consent for her images and other clinical information to be reported in the journal. The patient understands that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflicts of interest

There are no conflicts of interest.

Sarbjit Mohapatra, Chiranth Gowda, Bhavna Nayal[1], Gabriel Rodrigues

Departments of General Surgery and [1]Pathology, Kasturba Medical College, Manipal Academy of Higher Education, Manipal, Karnataka, India

Address for correspondence: Prof. Gabriel Rodrigues, Department of General Surgery, Kasturba Medical College, Manipal Academy of Higher Education, Manipal - 576 104, Karnataka, India.
E-mail: gabyrodricks@gmail.com

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