IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)
e-ISSN: 2279-0853, p-ISSN: 2279-0861.Volume 14, Issue 5 Ver. III (May. 2015), PP 118-120
www.iosrjournals.org

Unusual Lesions In The Breast Mimicking Breast Carcinoma: A Series Of Four Cases

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Abstract: *Carcinoma of the breast is the commonest breast lesion in elderly women. We present here four female patients aged 50 years, 65 years, 28 years and 40 years. These patients were referred to us for FNAC with the clinical diagnosis of carcinoma of breast. In first two patients FNAC revealed microfilariae. Other two patients showed the classical picture of tuberculous lesion in FNAC. All these patients were treated medically and were cured. Surgery could be avoided in all these cases.*
Keywards: *Filariasis of breast; Tuberculosis of breast; FNAC; Microfilaria.*

I. Introduction

Filariasis is a major public health problem in tropical countries. Filariasis mainly affects lymphatic system, spermatic cord, retroperitonel tissue, epididymis, etc. Involvement of breast tissue is a rare entity. It may present with breast lump mimicking Breast Carcinoma.Tuberculosis is a rare disease of extrapulmonary locations. But it may present with breast lump, abscess or mimiciking carcinoma.

II. Case Reports

Case 1

Female patient aged 50 years, postmenopausal, mother of three children was referred to the department of Pathology from the department of Surgery. There was history of painless breast lump in the left breast for six months. There was no history of nipple discharge or fever. Local examination revealed a breast lump measuring 3 cm x 4 cm (Fig 1) below the areola. The overlying skin was thick and edematous and fixed to the mass. There was regional ipsilateral mobile axillary lymphadnopathy. FNAC from the lump and the lymph node showed the presence of microfilaria (Fig 2). The patient was treated with diethylcarbamazine 3 mg / Kg four times daily for three weeks and improved with the therapy.

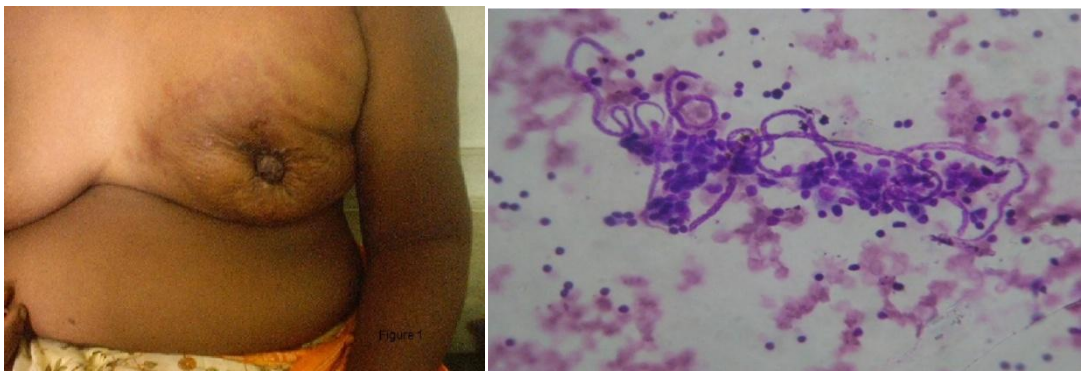

Figure 1: Clinical photograph with skin changes and nipple retraction.
Figure 2: Photomicrograph showing presence of microfilaria in the aspirate (MGG stain – X 400).

Case 2

A female patient aged 65 years, postmenopausal, mother of four children was referred to the Department of Pathology for FNAC. A lump was present in the upper and outer quadrant of the left breast. There was no history of fever or nipple discharge. On examination there was a lump measuring 4 x 3.5 cm. The skin was thick and free from underlying mass. There was no axillary lymphadnopathy. FNAC from the mass showed the presence of microfilaria. The patient was treated with Diethylcarbamazine 3 mg/Kg four times daily for three weeks and was cured. The lump disappeared completely after a follow up of 1 year.

Case3

A female patient aged 28 years, unmarried came to the Pathology Department for FNAC. A painless lump was present in the lower and outer quadrant of right breast and a scar of healed sinus was present. (Fig 3) No axillary lymph node was palpable. FNAC from the lump showed the presence of epithelioid granuloma (Fig 4).The Zeihl Neelsen stain of the smear showed the presence of Acid Fast Bacilli. The patient was HIV negative and she had normal chest X-ray. She was treated with ATD with daily dose of 300 mg Isoniazid, 600 mg Rifampicin, 1500 mg Pyrazinamide, and 10 mg Pyridoxine for six months and was cured.

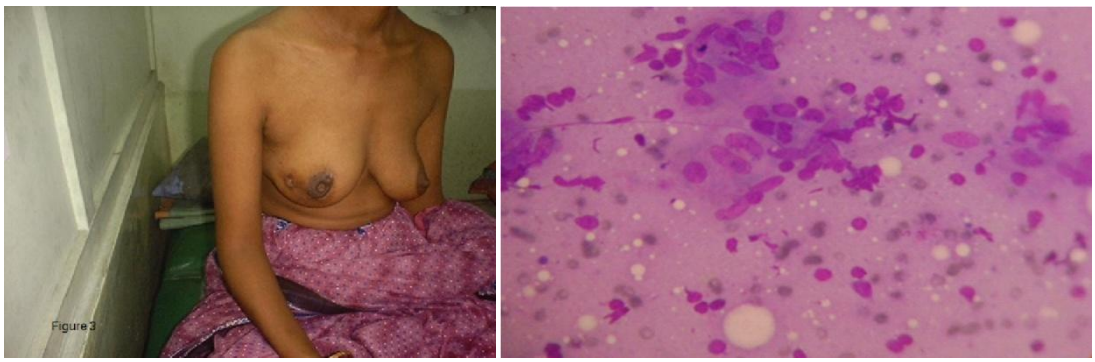

Figure 3: Clinical photograph of a patient with tubercular sinus of breast.
Figure 4: Photomicrograph showing presence of epithelioid cells forming granuloma in tuberculosis (MGG stain X 400).

Case 4

A female patient aged 40 years, mother of two children came to the Pathology Department for FNAC. A lump was present below the areola along with ulceration. There was ipsilateral lymphadnopathy. FNAC from the lump revealed epithelioid granuloma along with necrosis. Zeihl Neelsen smear showed the presence of Acid Fast Bacilli. The patient was HIV negative. The chest X-ray was within normal limits. The patient was treated with ATD with daily dose of 300 mg Isoniazid, 600 mg Rifampicin, 1500 mg Pyrazinamide, and 10 mg Pyridoxine for six months and was cured.

III. Discussion

Filariasis can be caused by Wuchereria bancrofti, Brugia malayi and Brugia timori[1]. The disease is transmitted by culex mosquito. Filariasis affects lymphatic system with mainly lower limbs, retroperitonel tissues, spermatic cord, epididymis affected. The disease is widespread in India but isolated breast lesion is uncommon. The patient usually presents with unilateral painless breast mass and there may be involvement of skin and lymph node mimicking malignancy[2,3]. The lump appears due to blockage of the breast lymphatic by larvae[4].

Filariasis of the breast is a recognized site of involvement although infrequent[5,6]. Our patients were treated with Diethylcarbamazine (DEC) 3 mg /kg dose four times daily for three weeks and was followed up in the outpatient department with satisfactory response. Combination of Diethylcarbazine citrate and other antifilarial drug have been used also with success[7,8].

Both of our patients were referred with the diagnosis of carcinoma breast clinically and FNAC could establish the diagnosis without doing any further investigations and both the patients were successfully treated with antifilarial drug.

Isolated breast tuberculosis is another uncommon lesion and its significance is due to mistaken identity with breast cancer. The breast can be the primary site but more Commonly tuberculosis spreads to the breast through the lymphatic system directly from the underlying structures e.g. ribs[9].There are three variety of tuberculosis : nodular, disseminated and sclerosing. Nodular variety is commonly present with fibroadenoma like picture, where as sclerosing variety present in old age with slow growing without any suppuration.

The clinical appearance of breast tuberculosis can be insidious and non specific and often simulates the signs of breast carcinoma[10,11]. FNAC is characteristic of necrosis and epithelioid granuloma in both patients.

The patients were treated with antitubercular drug with daily dose of 300 mg Isoniazid, 600 mg Rifampicin, 1500 mg Pyrazinamide, and 10 gm Pyridoxine for 6 months. Both the patients responded well to drugs and lumps disappeared. Rarely tuberculosis may coexist in the same breast with carcinoma [12].

IV. Conclusion

Filariasis and Tuberculosis involving breast is uncommon. Clinical awareness is essential particularly in countries where both these lesions are endemic. Diagnosis can be established by the Fine needle aspiration cytology, thus avoiding other investigations and also unnecessary surgical intervention.

References

[1]. Upadhyaya V, Upadhyaya DN, Sarkar S, An interesting case of breast filariasis. Indian J. Radiol. Imaging 2006; 16: 915-17.
[2]. Lang AP, Luchsinger IS, Rawling EG. Filariasis of the breast, Arch. Eath of lab Med 1987; 111: 757-759.
[3]. Lahiri VL, Microfilariae in nipple secretion, Acta Cytol 1975; 19: 154-155.
[4]. Alkadhi H, Garzoli E. Calcified filariasis of the breasts, N Engl. J. Med.2005; 352 (2) e2
[5]. Rosen PP. Specific infections. Rosen PP, ed. Breast Pathology Second Ed. Philadelphia,Lippincott Williams and Wilkins, 2001; 65-75.
[6]. Jungmann P, Figueredo-Silva J, Dryer G. Bancroftian lymphangitis in northeastern Brazil: A histopathologic study of 17 cases, J. Trop. Med. Hyg. 1992, 1995: 114-118.
[7]. Sunish IP, Rajendran R, Mani TR. Impact of single dose of DEC and other antifilarial drug combinations on Bancroftian filarian infection variables : Assessment after two years : Parasitol-Int. September 2006, 55 (3) : 223-236.
[8]. K Sahai, K Kapila, K Verma. Parasites in Fine needle Breast aspirates, assessment of host tissue response. Postgraduate Medical Journal, 2002, 78: 165-167.
[9]. Ioannis Maroulis, Charalambos Spyropoulos, Vasiliki Zolota, Evaggelos Tzorakolef Thakis . Journal of Medical case reports , 2008 : 2 : 34
[10]. Tewari M , Shukla HS, Breast tuberculosis : Diagnosis and clinical features and management, Indian J. Med. Res. 2005 , 122 : 103-110.
[11]. De Silva BB, Dos Santos LG, Costa PV, Pires CG, Borges AS, Primary tuberculosis of the breast mimicking carcinoma , Am J. Trop Med Hyg 2005:73: 975-976.
[12]. Ahmed A Alzaraa , Neha N Dalal, Coexistence of carcinoma and tuberculosis in one breast, World Jn. of Surgical Oncology 2008; 6: 29.