

An Interesting Case of Bilateral Breast Filariasis

Pawan Trivedi^{1*}, Vinay Kumar Jain², Santosh Kumar Jain², Neelam Jain², Swati Jain²

¹Consultant Pathologist, Ultra Diagnostic and Research Centre, Barabanki, UP, India

²Consultant, Jain Nursing Home, Barabanki, UP, India

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*Corresponding author: Pawan Trivedi

Abstract

Case Report

Filariasis is a common disease in India, however it occurs rarely at extranodal sites specially breast. Present case is of young female with painless lump in the both breasts for last one year. Provisional clinical diagnosis made was bilateral breast fibroadenoma. On aspiration cytology, the smears from bilateral breast lumps showed numerous microfilaria larvae along with fair number of mature lymphocytes in the background. Hence, a confirmed diagnosis of Filariasis, both breast was made. A simple and effective investigation, FNAC was able to avoid an unnecessary invasive, more painful and time taking procedure in this patient.

Keywords: FNAC, Bilateral Breast Lump, Filariasis, *Wuchereria bancrofti*.

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INTRODUCTION

Filariasis is a common and major comorbid condition. In India, the most common cause of filariasis is *Wuchereria bancrofti*. Commonly affected sites are lymph nodes [1]. Extranodal sites like breast are uncommon sites to be involved by filaria [2-5]. Other locations such as skin, soft tissue, epididymis, spermatic cord, lymph nodes, pleural and peritoneal fluids, hydrocele fluid, bone marrow etc., are the reported sites for filarial infestations [6-9]. Filariasis of bilateral breast is less known and a rare finding.

CASE REPORT

A young female of 18 year age presented with the chief complaint of slow growing, painless lump in both breasts along with off and on fever for one year. There was no history of trauma, loss of appetite, cough, evening rise of fever, weight loss, or nipple discharge. Family history for breast carcinoma was absent. On physical examination, there was no visible nipple discharge, nipple retraction or any skin changes. On palpation a firm, mobile, non-tender mass was felt in both breasts. Size of the bilateral lumps were approximately 1 cm in largest dimension each, located in the upper outer quadrant of right breast and retro-areolar region of left. There was no significant lymphadenopathy of axilla, neck or inguinal area.

FNA was performed using a 24G needle which yielded scanty, clear watery aspirate from bilateral lumps and smeared on glass slides. Smears were wet

fixed immediately in 95% ethanol and were subsequently stained with Leishman-Giemsa and PAP stain. Smears from both breasts showed occasional tiny clusters of ductal cells and numerous *Microfilaria* larvae. Background predominantly showed scattered population of mature lymphocytes (Figure 1 & 2). A cyto-morphological diagnosis of Filariasis both breast was made.

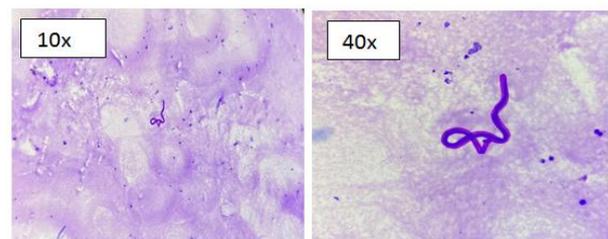


Fig-1: LG stained smears showing *Microfilaria* larva and scattered mature lymphocytes in the background (Right breast)

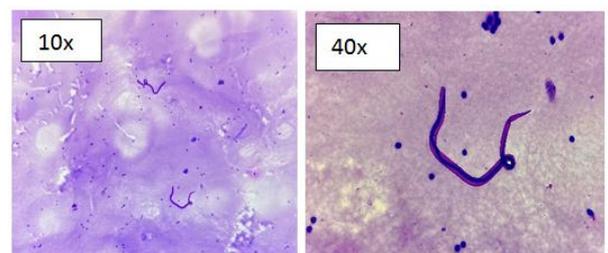


Fig-2: LG stained smears showing *Microfilaria* larva and scattered mature lymphocytes in the background (Left breast)

DISCUSSION

Prevalence of filariasis is high in Asia and Africa, however it occurs in most parts of the world. In India and other Asian countries, the burden of disease is mainly because of *Wuchereria bancrofti*. Other filaria causative parasites are *Brugia malayi* and *Brugia timori* [10]. Lymph nodes and lymphatic vessels are main target sites of *Wuchereria bancrofti*. Filariasis of female breast is rare and hence not many cases have been reported [2-5]. In most of reported cases, the main causative agent for breast filariasis is *Wuchereria bancrofti*. In breast, the most common location is upper outer quadrant which was observed in right breast of our case. Several case reports have mentioned retro- or peri-areolar location also which was observed in left breast of our case [4]. As the larvae infests the breast lymphatics causing lymphangitis and disruption of lymphatic drainage, result in oedema of skin with peau d'orange and may mimic carcinoma breast [1, 11]. On smears, parasites along with eosinophils as major inflammatory cell, is the predominant finding. However, no eosinophils were found in our case. FNAC is effective and less invasive tool and has been used to diagnose cases of filarial nodule in breast [2-5]. Thus, in patients with mass lesions, FNAC can be used as an effective diagnostic tool.

CONCLUSION

FNA smear is very sensitive to demonstrate filarial parasite and also a reliable mode of diagnosis that prevents unnecessary surgical intervention in breast lump cases.

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