

**Case Report**

## **Microfilaria in breast: Case Report**

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### **Abstract**

Lymphatic filariasis is a major public health problem in India and is increasing yearly due to mismanagement of the environment. The disease is endemic throughout India. We present a case of lump in breast for 6 months diagnosed to have filarial granuloma.

**Key words:** Filariasis, Breast

### **1. Introduction**

Filariasis is a major public health problem in many countries, including India. Most filariasis is caused by nematodes *Wuchereria bancrofti*, *Brugia malayi*, *B. timori*, *Onchocerca volvulus*, *Mansonella perstans*, *M. streptocerca*, *M. ozzardi*, *Dirofilaria conjunctivae*, *D. magalhaesi*, *D. immitis* and *Loa-loa*. *Wuchereria bancrofti* and *Brugia malayi* are the most common species seen in India. They are transmitted by the bite of the *Culex* mosquito. Lymphatic filariasis involving the female breast is unusual but not rare, especially where filariasis is endemic.

### **2. Case Report**

A 23-year-old married woman residing in Nagpur presented with a very slow growing painless lump in her left breast of 6 months duration. There was no history of fever, cough, weight loss, or trauma. Neither was there any history of nipple discharge. There was no family history of breast carcinoma.

On examination there was a firm, discrete, non-tender, 3×2 cm lump with smooth surface in the upper, outer quadrant of left breast. It showed limited mobility within breast tissue and was free from overlying skin and underlying muscle. There were no palpable axillary lymph nodes on either side. The opposite breast was normal. Routine examination of blood was normal. Fine needle aspiration cytology showed few histiocytes, inflammatory cells composed of lymphocytes, neutrophils, eosinophils, intact and degenerated forms of microfilaria. Lump excision was done.

Histopathological examination revealed breast tissue showing dead microfilarial adult worms showing smooth cuticle and sheath covering the whole of the worm. Surrounding diffuse dense inflammatory infiltrate composed of eosinophils and neutrophils suggestive of Filarial granuloma of left breast.

The patient received di-ethyl-carbamazine citrate, in the dose of 6 mg/kg/day for 4 weeks and is on regular follow up since 2 months with no recurrence.

### **3. Discussion**

Filariasis of breast is occasionally seen in tropical areas where filariasis is endemic and usually presents as a unilateral painless solitary non-tender breast mass, commonly in the upper and outer quadrant.<sup>1</sup> Sometimes, skin over the nodule may be hyperemic with changes of peau d'orange, and the axillary nodes may be enlarged.<sup>2</sup> Some other parasitic infections like cysticercosis, schistosomiasis may also present as lumps in the breast and are often clinically thought to be malignant.<sup>3</sup>

Mammography of breast filariasis may show those of benign appearing groups of elongated and serpiginous calcification with or without lucent centers, which are located in the connective tissue unrelated to the ducts.<sup>4</sup> Sono mammography may show feature labelled as filarial dance.<sup>5</sup>

Microfilariae may sometimes be detected in fine needle aspirates from the breast lump as in above case even though thick peripheral blood smear examination may not reveal them.

The above case suggests not forgetting filariasis as one of the differential diagnosis of breast lumps especially in endemic areas.

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