CASE REPORT

Filariasis of The Breast

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Abstract

Filariasis of the breast presenting as a breast lump and clinically simulating a breast cancer is an unusual presentation. The present case is of a 42 year old female whose breast lump was excised and histopathology revealed filariasis.

Key Words

Filariasis, Breast Lump.

Introduction

Filariasis is very frequently encounterd in the Asian, African and some of the South American countries. A large majority of the cases found in India are attributed to infection by Wuchereria bancrofti which mainly affects the lymph nodes and the lymphatic channels(1). Breast is an unusual site for filariasis. In the present case report the patient presented with a gradually increasing breast lump which was clinically suspected to be malignant. However, lumpectomy showed evidence of filariasis.

Case Report

A 42 year old female presented in the surgical OPD of Government Medical College Hospital Jammu (J & K), with complaint of a gradually increasing lump in the upper outer quadrant of the left breast. The history dated back to 25 days and at the time of presentation the lump measured roughly 2.5 cm by 1.5 cm. The lump was fixed to the underlying breast tissue, however, the overlying skin, the nipple and areola were unaffected. Axillary lymph nodes were not palpable. Routine hematological investigations were normal and the peripheral blood film failed to reveal eosinophilia or presence of any haemoparasite. Mammography showed a few specks of calcification, thus, supplementing the clinical suspicion of malignancy. The lump was immediately excised.

Grossly the excised specimen measured 3 cm by 2 cm by 1.5 cm and consisted of fibroadipose tissue. Cut section revealed a greyish yellow mass measuring 2 cm by 1.5 cm. Microscopic examination of the sections from the mass showed numerous microfilarial larvae (fig 1) along with an adult filarial worm (fig 2). Both the larvae as well as the adult worm were surrounded by dense chronic inflammation rich in histiocytes, eosinophils, plasma cells and lymphocytes. The surrounding breast tissue showed fibrosis.

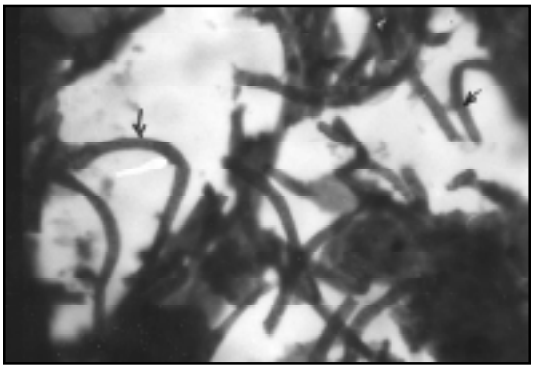

Fig 1 : Showing numerous microfilarial larvae (arrows). H&E, X40.

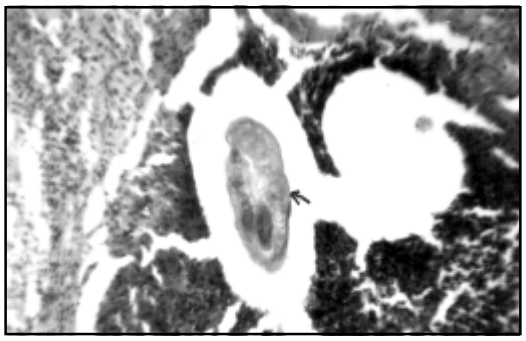

Fig 2 : Showing an adult filarial worm. H&E, X40.

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Discussion

In India, Wuchereria bancrofti is distributed chiefly along the sea coast and along the banks of big rivers (except Indus). But it has also been reported from Rajasthan, Punjab, U.P. and Delhi(1). Adult worms are found in the lymphatic vessels and lymph nodes of human beings only i.e. Bancroftian filariasis is not a zoonotic disease (2).

Brugia malayi is another filarial nematode, which is mainly found in the Far East, Sri Lanka and South India. In infection with Brugia malayi, domestic animals like cats and dogs may serve as reservoirs of infection (2).

Adult female worms of both the species cannot be distinguished and adult male worms show minor differences only. So species diagnosis is made on the basis of the morphology of the microfilariae. Mf. malayi are smaller than Mf. bancrofti, possess secondary kinks instead of a smooth curve and unlike Mf. bancrofti, the tail tip of Mf. malayi is not free from nuclei(2). On the basis of microfilarial morphology, the present case seemed to be that of Bancroftian filariasis.

In lymphatic filariasis the sites commonly involved are lungs(4), bronchial aspirate(5), cervico-vaginal smears(6) and pleural(5) and pericardial fluids(7). Breast lesions, though unusual, are not rare and swelling of the breast due to obstruction of the dermal lymphatics by the filarial worm has been documented(8).The present case did not have any clinical evidence of filariasis and there was no microfilaraemia i.e. the patient had occult filariasis. In this condition microfilariae are found in affected tissues but not in peripheral blood. This can be seen in endemic areas where filariasis can exist without microfilaraemia or microfilaraemia may be extremely transient and hence overlooked(9). But Bancroftian filariasis, presenting as a breast lump, is a very rare occurrence in Jammu and Kashmir, especially, since the case in question had never travelled to the known endemic areas. The occurrence of the disease in a native of Jammu can be explained on the basis of one of the following possibilities:

1. The patient had come in contact with another case of filariasis who was a native of an endemic area, say someone from the labour class or army personnel and / or their family members.

2. The patient had acquired the parasite from domestic animals. This is an extremely rare possibility though, since firstly Bancroftian filariasis is not a zoonotic disease and secondly animals in a non-endemic area are unlikely to harbour the parasite(2).

3. The patient might have travelled, in the not so recent past, to a neighbouring state like Punjab or a metropolitan city like Delhi from where cases of filariasis have been reported.It must be mentioned here that it takes anywhere between five to eighteen months for the larval form injected in man by the mosquito to grow into sexually mature adult forms(2).

Whatever the mode of disease acquisition, filariasis of the breast in a native of Jammu and Kashmir is uncommon enough to merit reporting.

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