



MID ARM SWELLING : A CASE REPORT OF ATYPICAL PRESENTATION OF LYMPHATIC FILARIASIS IN A 38 YEAR OLD MALE RESIDING AT TRIBAL AREA OF MAHARASHTRA

Community Medicine

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ABSTRACT

Bancroftian Filariasis is a tropical and subtropical disease caused by *Wuchereria bancrofti* and transmitted by the *Culex* mosquitoes. The diagnosis of it is conventionally made by demonstrating microfilariae in the peripheral blood smear. Microfilaria and adult filarial worm have been incidentally detected in fine needle aspirates of various lesions. We here report a rare case presentation of Bancroftian filariasis in 38 years old male coming from an endemic area with swelling in subcutaneous tissue of right mid-arm. Our aim is to highlight the finding of microfilaria in fine needle aspiration cytology in an unsuspected case at an unusual site.

This case report signifies the importance of FNAC in early diagnosis of lymphatic filariasis which may present as isolated lymphadenopathy and importance of meticulous screening cytological smears.

KEYWORDS:

Introduction:

Lymphatic filariasis is transmitted by mosquitoes and is caused by closely related nematodes, *Wuchereria bancrofti* and *Brugia* species (*B. malayi* or *B. timori*) which are responsible for 90% and 10% respectively, of the total number of the infections worldwide⁽¹⁾. While having a look at global burden of disease about 120 million people are currently infected worldwide and in need of treatment including 40 million disfigured and incapacitated by the disease⁽²⁾. *W. bancrofti* is the most common cause of filariasis in India which is transmitted by *Culicine* mosquitoes and is a major public health problem^(3,4). India contributes to about 40% of the total global burden of the disease and 50% of the population are at risk of infection⁽⁵⁾. Filariasis may produce acute as well as chronic clinical manifestation or a person may remain asymptomatic in endemic areas⁽⁶⁾. Usually the disease follows a chronic course with predominant involvement of the lymphatic system of lower limbs, retroperitoneal tissue, spermatic cord and epididymis⁽⁶⁾. Despite the large number of people affected, it is unusual to find microfilaria in routine cytology smear and their recognition is generally considered an incidental finding^(7,8,9). Filariasis presenting as subcutaneous swelling involving upper extremities is rare⁽⁶⁾.

Case presentation:

A 38 year old auto driver presented to surgery OPD with swelling over right bicipital region (arm) medial aspect since 3 years. It was clinically diagnosed and treated as lipoma without any surgical intervention since 3years. Now patient has developed immobility of right arm also and was advised baseline investigations including FNAC. FNAC showed multiple rhabditiform larvae of *w. bancrofti* with eosinophilia on background of lymphocytes. Diagnosis of lymphatic filariasis was made. Patient was advised USG which showed filarial dance in lymph node, he was called at 8pm when subsequent blood sample was taken which showed filaria with eosinophilia.

Patient was treated with DEC (Diethylcarbamazine) for 12 days and on follow up was found fit for his routine activities with subsiding of lymphedema and swelling.

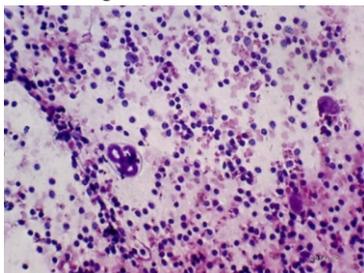


Fig1: Microfilaria in sheath

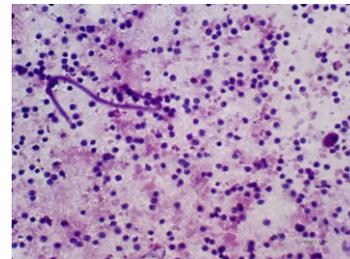


Fig2: Microfilaria in inflammatory background H & E 40 X

Discussion:

Filariasis is a major public health problem in tropical countries, especially India, China, Indonesia and some parts of Africa and South America^(3,7,10,11). *W. bancrofti* is responsible for 90% and *Brugia* species for 10% of the total numbers of infections worldwide. Disease is also been reported from Rajasthan, Punjab, U.P. and Delhi⁽⁶⁾.

Kadam et al found similar isolated lymphadenopathy in supraclavicular region which further on FNAC showed positive for microfilaria⁽¹²⁾.

Garg et al found similar case of isolated mid arm lymphadenopathy in North India region, which showed microfilaria on histopathological examination⁽¹³⁾.

Haren Oza et al found similar case of isolated mid arm lymphadenopathy in Gujarat region, which showed microfilaria on histopathological examination⁽¹¹⁾.

V.G.Muddamwar et al had reported similar case of lymphatic filariasis of mid arm from Nanded region of Maharashtra⁽⁹⁾.

Conclusion:

Parasitic infections are curable with proper management of case. FNAC plays significant role in diagnosing filarial infections in asymptomatic, unsuspected cases of filaria in countries like India where it is endemic, thus avoiding more severe manifestations of lymphatic filariasis. Careful screening of cytological smear plays important role in diagnosis. Chandrapur district being endemic area for filaria shows multiple cases every year; classical presentation in those cases being lymphoedema of legs with inguinal lymphadenopathy. This article reports atypical presentation of lymphatic filariasis.

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