



## LYMPHATIC FILARIASIS LEFT UPPER ARM: A RARE CASE STUDY

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## KEYWORDS :

## INTRODUCTION

Lymphatic filariasis is a common public health problem in the endemic areas. Lymphatic filariasis affects over 120 million people worldwide. Filariasis and its complications are major health problem in tropical countries. Patient usually presents with pyrexia, lymphadenopathy, epididymo-orchitis and elephantiasis. Filariasis in India is caused by *Wuchereria bancrofti* or *Brugia malayi*, both are vector borne disease transmitted by *Culex* mosquitoes. During circulation, microfilaria is lodged in various organs that can be demonstrated by FNAC. One such case of a filarial swelling is being reported at a very atypical location that is near the elbow joint.

## CASE REPORT

A 20 years old male presented in surgery OPD with painless swelling on the lateral aspect of left elbow for 2 weeks. On examination, a swelling around 2x2 cm, non-tender, freely mobile, neither fixed to skin nor underlying structure was present. Temperature over the swelling was normal. The patient gave no history of fever, weight loss, evening rise of temperature, or any similar swelling elsewhere. Cardiorespiratory and neurological findings were negative. There was no evidence of icterus, clubbing, bony tenderness, lymphadenopathy or organomegaly. Investigations revealed haemoglobin of 10gm/dl, Mean Corpuscular Volume (MCV) 90.2fl, Mean Corpuscular Haemoglobin (MCH) 28.8 pg, and Mean Corpuscular Haemoglobin Concentration (MCHC) of 32.0%. The Total Leukocyte Count was 12000 cells per cumm, with a Differential Count of Polymorphs of 74%, Lymphocytes of 20% and eosinophil of 6%. Platelet Count was 1.65 lac per cumm. FNAC finding showed parasitic granuloma and Leishmann stain of the smear revealed microfilaria. The patient was diagnosed as a case of Filariasis and was treated with Tab Diethyl carbamazine 300mg daily for 21 days. The swelling responded and started decreasing in size and completely disappeared within 2 months.

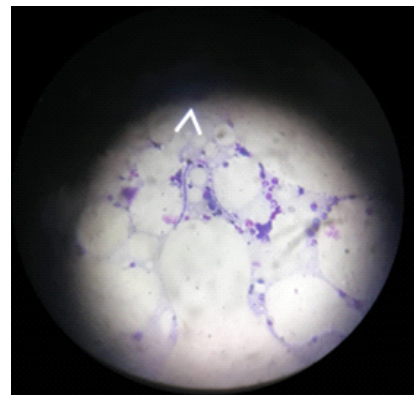


FIG 1: picture showing the swelling over the elbow

## DISCUSSION

*Wuchereria bancrofti* is the most common cause of filariasis in India. Once the filarial larvae is deposited at the puncture site it penetrates

the skin and subcutaneous tissues on its own. Upon entering the lymphatic system it settles in the regional lymph nodes. It matures and produces new larvae by 5-18 months. These larvae then enter the circulatory system through the thoracic duct to the venous system and then to pulmonary system and finally enter into the peripheral circulation and get lodged to various sites and organs of the body.



**FIG 2:** Smear shows a few lymphocytes and microfilaria against thin proteinaceous background. Generally presentation is preferably in lower limbs and presenting as lymphadenitis. Other sites may include thyroid, lymph node<sup>(1,2)</sup> liver, lungs, breast<sup>(1,2,3)</sup> subcutaneous nodules<sup>(1,2)</sup> and various body fluids.

Pradhan S reported that microfilariae of *W. bancrofti* were detected in seven cases of anaemia in persons with asymptomatic Filariasis. In three cases microfilariae could not be detected in the blood<sup>(4)</sup>. In our case it's the lateral aspect of the left elbow joint which is rather rare and furthermore it was a solitary swelling with no supporting history and finding suggestive of filarial infection. Even the blood smear was negative for filarial. Peripheral blood eosinophilia is a common haematological finding in filariasis. But in a majority of the reported cases, in which microfilariae were demonstrated in absence of eosinophilia in PBS<sup>(4,5)</sup>.

## CONCLUSION

Filariasis should be kept as a differential diagnosis in cases of isolated swelling over the extremities.

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