



## A DIAGNOSIS OF FILARIAL PARASITE- REVIEW IN GOVERNMENT AYURVEDIC HOSPITAL NANDED

**Dr. Jyoti Meghdambar<sup>1</sup>, Dr. Shubhangi Masugade\*<sup>2</sup> and Dr. Monica Bombe<sup>3</sup>**

<sup>1</sup>Guide, Assistant Professor, Department of Roganidan, Government Ayurved College, Nanded, Maharashtra.

<sup>2</sup>PG (Scholar), Department of Roganidan, Government Ayurved College, Nanded, Maharashtra.

<sup>3</sup>PG (Scholar), Department of Roganidan, Government Ayurved College, Nanded. Maharashtra.

**\*Corresponding Author: Dr. Shubhangi Masugade**

PG (Scholar), Department of Roganidan, Government Ayurved College, Nanded, Maharashtra.

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### ABSTRACT

Filariasis is a disease group affecting humans and animals caused by Filariae – Nematode parasite of the order Filariidae. Of the hundreds of described filarial parasites only 8 species cause natural infections in humans. The World Health Organisation (WHO) has identified lymphatic filariasis as the second leading cause of permanent and long term disability in the world after leprosy. But while studying about Filariasis, it came in front that monthly 2-3 patients were admitted in our hospital and which was diagnosed positively for Filarial parasite. It means that Filariasis has a significant, economic and psychosocial impact in endemic area in Nanded District. In this paper, the patients visiting to the Government Ayurved Hospital, Nanded were diagnosed and sent for further treatment. In this paper few of the photographs of parasites were attached.

**KEYWORDS:** Filariasis.

### INTRODUCTION

Filariasis- It is kind of parasitic infection caused by three specific kinds of round worm.<sup>[1]</sup>

Definition – Filarial infection are caused by parasitic tissue swelling, filarial nematode worm which are transmitted by biting insects.<sup>[2]</sup>

#### 1. Which are the two main Filaria?<sup>[3]</sup>

The two main Filaria types are

1) Lymphatic Filariasis transmitted by mosquitoes  
Lymphatic filariasis- *W. bancrofti* transmitted by *Anopheles culex* and *ades* mosquitoes. *Brugia timori* transmitted by *Anopheles barbirortris*.

2) Subcutaneous filariasis transmitted by biting flies.

#### 2. What is the periodicity of microfilaria?<sup>[4]</sup>

In most endemic areas the microfilariae of *W. bancrofti* appear in greatest number in peripheral blood in the night between 10 p.m. and 2 a.m. during the day they return to the pulmonary capillaries. Microfilariae of *B. malayi* exhibit either nocturnal periodicity with a peak in the early evenings

#### 3. Which are the acute clinical features?<sup>[5]</sup>

- Filarial fever
- Filarial lymphangitis and lymphadenitis

#### 4. What are the chronic features?<sup>[6]</sup>

- Hydrocele
- Lymphoedema
- Elephantitis
- Rupture of lymphatic varices
- Tropical Eosinophilic syndrome

#### 5. How to diagnose the patient?<sup>[7]</sup>

1) Simple parasitological confirmation depends on finding the characteristic sheathed microfilariae in a thick blood film taken at peak of periodicity of the strain (usually mid-night) and stained

2) Enzyme linked immunosorbent assay card test detects circulating *W. bancrofti* antigens and *W. malayi* DNA can be detected using PCR analysis.

#### 6. How to manage the filarial infection?<sup>[8]</sup>

Drugs – Diethylcarbamazine citrate (DEC) kills the microfilariae and proportion of adult worm of the lymphatic-dwelling filariae a single dose of 6mg/kg given annually is effective in the long term killing of microfilariae and adult worm.

It is usually given in mass campaign to reduce transmission along with an annual dose of albendazole 400mg which supplements its antifilarial action. DEC must not be used in area where oncocerciasis and / or loiasis are coendemic. In these areas the alternative is an

annual dose of Ivermectin 150ug/ kg with albendazole 400ug.

#### **Palliative treatment**

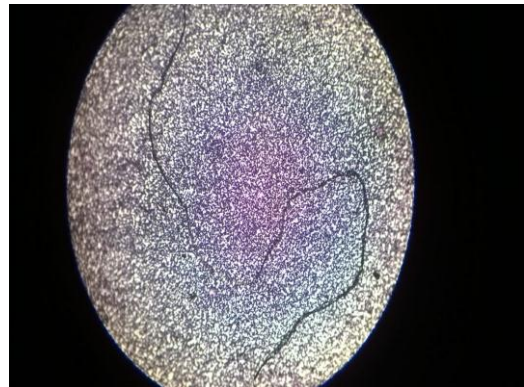
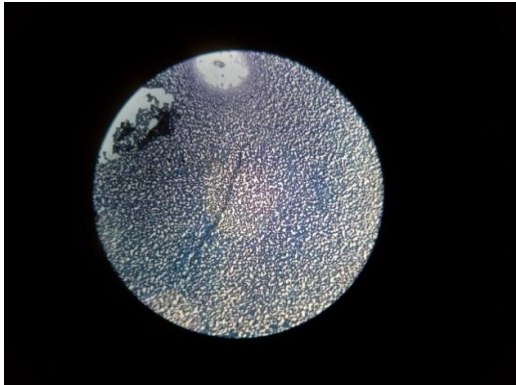
1) Acute Lymphangitis- Rest, elevation of limb, hot fomentation, infra-red rays or short wave diathermy. Analgesic for relief of pain. Broad spectrum antibiotics to control infection

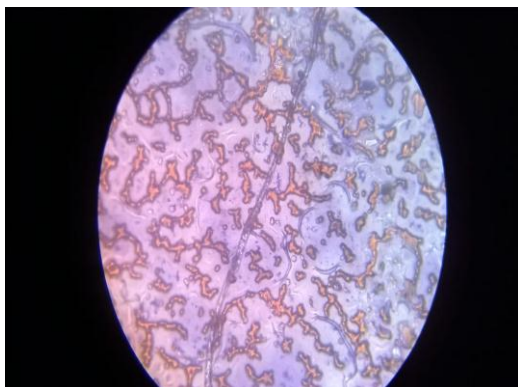
2) Elephantiasis – Since bacterial and fungal infections trigger most episodes of adenolymphangitis in tissues with compromised lymphatic function, simple hygiene measures are

1. Twice daily washing of affected parts with soap and water
2. Raising the limbs at night
3. Keeping the nails clean
4. Wearing shoes
5. Use of antiseptic or antibiotics creams to treat small wound or abrasion

#### **Diagnosis**

The blood sample were collected at midnight. The smear is stained with field stain A and B, Then the observations were made microscopically. Here are the few filarial parasites found in our Government Ayurved hospital, Nanded.





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## CONCLUSION

Efforts to be made to hamper and eliminate filarial parasite. Keeping in mind the consequence and result of filariasis infection control measures should be set up and effective measures are to applied. Filariasis is one of the cause of long term disability and one of the cause of mortality.

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