## **CASE REPORT**

### A NEGLECTED CASE OF FILARIASIS IN AN ENDEMIC AREA OF NORTH EASTERN KARNATAKA: AN APPROACH TO PREVENT MORBIDITY AND DISABILITY: A CASE REPORT

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ABSTRACT: Title: A Neglected Case of Filariasis in an Endemic area of North Eastern Karnataka: An Approach to Prevent Morbidity and Disability. **INTRODUCTION:** Lymphatic Filariasis is a vector born disease found in 73 countries throughout the tropics and subtropics of the world affecting over 120 million people causing painful, profoundly disfiguring disease with temporary or permanent disability. **CASE PRESENTATION:** We report a case of Chyluria due to Lymphatic Filariasis which was neglected by the medical practitioners for past one year. A 40-year-old male farmer visited the Primary Health Centre and BRIMS teaching hospital repeatedly during the past one year with a complaint of excretion of milky white urine with mild weight loss and physical weakness. The patient was undiagnosed for Filariasis. However, his urine examination revealed proteinuria with scanty pyuria, fat globules and elevated level of urinary triglyceride. Urine culture was found to be sterile. On physical examination of the patient, there was no visible swelling over the body. No enlarged lymph nodes were seen except non-tender minimal scrotal swelling. Radiological examination of chest and pelvis had shown no calcification of lymph nodes. Overall, no abnormal findings were observed. Diagnosis revealed presence of microfilaria in peripheral blood smear after Diethylcarbamazine (DEC) provocation test. The patient was prescribed the 12 days treatment regimen of DEC with Albendazole and asked to visit again for follow up. CONCLUSIONS: As this area is endemic for Filariasis in Karnataka state, it is a warning sign for the medical practitioners not to ignore patients presenting with Chyluria and to mandatorily investigate the presence of microfilaria even after mass drug administration. In this case the microbiological investigations helped prevent the patient from morbidity and disability due to Filariasis in future.

**KEYWORDS:** Chyluria, Endemic, Lymphatic Filariasis.

**INTRODUCTION:** Lymphatic Filariasis, one of the 17 neglected diseases, commonly known as Elephantiasis, is a vector born disease found in 73 countries throughout the tropics and subtropics of the world affecting over 120 million people causing painful, profoundly disfiguring disease with temporary or permanent disability.<sup>[1-3]</sup>

It is caused by several round coiled and thread like parasitic worms belonging to the family Filaridea.

**CASE PRESENTATION:** We report a case of Chyluria due to lymphatic Filariasis which was neglected by the medical practitioners for past one year.

**Clinical Summary**: A 40-year-old male, farmer by occupation, visited the Primary Health Centres Peripheral Clinic and BRIMS Teaching Hospital repeatedly during the past one year with a complaint of excretion of milky white urine intermittently with mild weight loss, fatigue and physical weakness.

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On physical examination of the patient, there was no visible swelling over the body. No enlarged lymph nodes were seen except non-tender minimal scrotal swelling without inflammation. Radiological examination of chest and pelvis had shown no calcification of lymph nodes. Overall, no abnormal findings were observed.

**Laboratory Findings**: The gross appearance of patient's urine was milky white. His albumin was low and urine examination revealed proteinuria with scanty pyuria, fat globules and elevated level of urinary triglycerides. Urine wet mount revealed no microfilaria and culture report was found to be sterile.

**Peripheral blood Examination**: Diethyl Carbamazine (DEC) provocation test was done for the patient by administering 50 mg of DEC tablet and venous blood was collected. The wet mount of blood showed motile microfilaria. A thick blood film was made and stained with Giemsa stain. It revealed the presence of sheathed microfilaria which was identified as microfilaria of Wucheria bancrofti based on the presence of sheath, blunt head and pointed tail end with presence of nuclei throughout the body except near the head and tail end as per the text book references.<sup>4</sup>

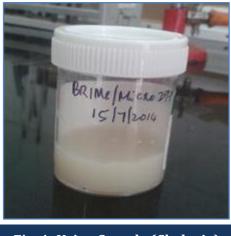


Fig. 1: Urine Sample (Chyluria)



Fig. 2: Giemsa staining: Microfilaria of Wucheria bancrofti (Oil immersion)

**DIAGNOSIS**: The patient was prescribed 12 days treatment regimen of DEC with Albendazole and asked to visit again for follow up. The patient started recovering and excretion of Chyluria was reduced. Further, he was advised to take treatment for three months for complete eradication of larvae and adult worms.<sup>[5]</sup>

**DISCUSSION:** Lymphatic Filariasis is a major public health problem in India second only to malaria and cases have been reported from about 250 districts in 20 states and union territories.

Elimination of this disease is important as patients suffer mentally and social and financial losses contribute to stigma and poverty.

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**CONCLUSION:** As this area is endemic for Filariasis in Karnataka state.<sup>1</sup> it is a warning sign for the medical practitioners not to ignore patients presenting with Chyluria. A thorough investigation must be compulsorily done for the presence of microfilaria even after mass drug administration as 80% of the Chyluria cases are due to infection with Wucheria bancrofti. In this case the microbiological investigations helped prevent the patient from morbidity and disability due to Filariasis in future.

Chyluria cases are most common in endemic areas. This case was neglected and found to be interesting and has thus been reported.

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#### **REFERENCES**:

- 1. http://nvbdcp.gov.in/filariasis-new.html.
- 2. http://www.who.int/mediacentre/factsheets/fs102/en/
- 3. http://www.cdc.gov/parasites/lymphaticfilariasis/
- 4. Parija SC. Textbook of Medical Parasitology: Protozoology and Helminthology, 4th edition. Puducherry: AIPD; 2013.
- 5. http://www.icmr.nic.in/annual/201011/English%20Annual%20Report/comm.pdf

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