

Case Report

A Rare Case of Filariasis With Chyluria and Mono-Articular Arthritis

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ABSTRACT

Filarial infection are common in most tropical and subtropical regions of the world. According to WHO, 533million peoples are at the risk of Filariasis in which 21million have Filariasis symptoms of it and 27 million are micro filarial carriers¹. In India Wucheria Bancrofti is main organism accounting for 98% filarial cases. In all reported cases lymphatic Filariasis is most common with few cases of Chyluria and rare case of Filarial Mono-articular Arthritis. Reporting a case of Filariasis with clinical manifestation of Chyluria associated with Mono-articular Arthritis².

Introduction: lymphatic Filariasis caused by Wuchertia Bancrofti and Brugiamalayi is one of the major public health issue in Indian population². Few ancient references are found in Ayurved in which disease symptoms, area where it is common and treatment is described⁽³⁻⁴⁾. the most common presentation of lymphatic Filariasis is subclinical micro filarial, acute adenolymphangitis, hydrocele and chronic liver disease. Most cases in India are reported as chronic swelling of leg (elephantitis)⁵.

Initially there is dilation of lymph vessel with subsequent inflammation and formation of nodular tissue with dilated lymphatic vessels. This lymphatic may rupture leading to direct lymph leakage causing Chyluria and Filarial Arthritis⁶.

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Case report

A male patient of age 22yrs migrant from UP to Maharashtra now residing in Theour, Pune presented with complaints of :-severe pain at left hip joint radiating to lower leg, disability to walk, burning micturition and milky urine. Patient has taken treatment at different hospitals but

getting worse without relief .Patient was previously diagnosed as Sacroillitis.

There was no history of vomiting, swelling of limbs nausea .On clinical examination SLRT active :- Rt side -30 and left side:- 0. There was no sensory neural deficit .General systemic examination was normal.



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Laboratory investigations suggests leucocytosis (17,500) with albuminuria and 4-5 pus cell on urine routine examination though culture sensitivity showed no growth with negative serological status. USG (abdomen + pelvis) showing lt renal 3mm mid pole calculus and tiny splenic calcification.

Patient was given Diethyl Carbazamine in a dose of 100mg twice daily for 7 days then followed a early morning blood smear sample for Filarial nematodes smear showed presence of *Wucheria Bancrofti*. It was done with the help of simple zn stain. Cystoscopy and Retrograde Pyelography was carried out which shows normal pathway and no any obstructed channels or fistulae.

Patient was given Diethyl carbamazine for 30 day, Albendazole 400mg 1 OD for 90 days, Doxycycline 100mg 1 BD for 6 weeks.

After 2 Weeks patient shows mild reduction in Chyluria And completely relieved from hip joint pain with all movements within normal limit. After this patient was given *Ajwain* (*Trachyspermum Ammi*) 10mg TDS after 4 weeks patient showed significant reduction in chyluria.⁷

During the course of treatment patient devolp severe neck stiffness and headache after 3weeks of commencement of treatment. Which is may be because of Albendazole.⁸ Patient got no relief with any analgesic and was planned for snehan swedan followed by Nasya with Mashadi kwath and viddha karma. To this regimen patient showed significant reduction in complaints. At the end of 90 days of treatment patient got completely relieved from all of complaints.

Case discussion

Chyluria is a state of chronic lymphourinary reflux via fistulous communication secondary to lymphatic

stasis caused by obstruction to lymphatic flow.⁹ Chyluria occurs in 2% of filarial affected patients. If the obstruction is between the intestinal lacteals and thoracic duct, the resulting cavernous malformation opens into the urinary system forming a lymphourinary fistula once such fistula is formed intermittent or continuous chyluria occurs .This loss of intestinal lymph which is rich in lipids and protiens leads to severe malnutrition, hypoalbuminemia and weight loss⁹.

Adding to this, arthritis has been long recognised as a possible manifestation of filarial infection .2 types of Arthritis has known:

- 1) Oligoarticular filarial arthritis
- 2) Polyarticular filarial pseudo rheumatism²

Oligo articular filarial arthritis a rare condition that typically afflicts one large joint. The entity can be distinguished from other form of arthritis by clinical criteria associated with laboratory findings and its prompt response to Diethyl carbamazine.

Its pathogenesis is under synovial fluid from the affected joint. Ordinarily it does not contain microfilariae adult worms or Pyogenic organism but the monoarticular inflammation may be reflected as tissue reaction to filarial worms in the vicinity of the joint. Rarely lymphatic fistulation into synovial sac causes chyulus arthritis chances of which cannot be excluded in this case¹⁰⁻¹¹.

The management of cases of chyluria includes bed rest, high protein diet ,diethylcarbamazine and use of abdominal binder,which is claimed to prevent the lymphourinary reflux by increasing the intraabdominal pressure.¹²

Antiplatelet- Aggregatory, Anti-Inflammatory, Antifilarial, Gastro-protective, Nematicidal, Anthelmintic action of ajwain is known and so was given to patient.¹³⁻¹⁴ Antifilarial action of Ajawin is explained well by Mathew N et al.¹⁵ Seeds

contains resin acids, palmitic acid, petroselenic acid, oleic acid and linoleic acid. Vitamins and trace elements include riboflavin, thiamin, nicotinic acid, carotene, calcium, chromium, cobalt, copper, iodine, iron, manganese, phosphorus and zinc, and also consist of moisture 7.4%, protein 17.1%, fat 21.8%, minerals 7.9%, fiber 21.2% and carbohydrates 24.6% as per 100 grams.¹⁶

Mashadi Kwath Nasya has been explained in the context of *Manyasthambha* i.e. neck stiffness which in this case has shown significant reduction in the stiffness which was not relieved by other analgesic after a long treatment scenario.¹⁷

Conclusion: Filarial Chyluria is a serious condition affecting the general health of patient and in contrast Filarial Arthritis is a clinical condition mimicking other joint condition. So, it needs a prompt clinical diagnosis assisted with a laboratory confirmation after which the treatment will go in a correct direction.

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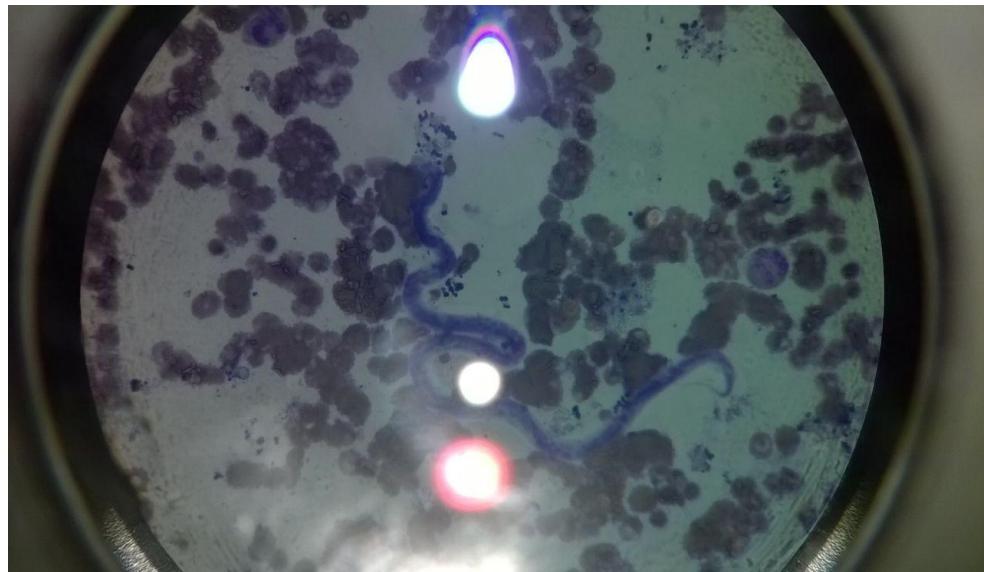


Fig.1. *Wuchereria Bancrofti* on smear



Fig.2. Before treatment (chyluria)



Fig.3. After month



Fig.4. Complete resolution