

Neglected Elephantiasis in Rural Bihar: A Clinical Encounter from Community Health Practice

Dr. Vaibhav Karna¹, Dr. Vaibhav Karna²

¹Specialist Medical Officer, Community Health Centre, Babubarhi, Madhubani, Bihar, India

²Specialist Medical Officer, Community Health Centre, Babubarhi, Madhubani, Bihar, India
Corresponding Author Email: [drvaibhavkarna\[at\]gmail.com](mailto:drvaibhavkarna[at]gmail.com)

Abstract: *Lymphatic filariasis continues to affect many people living in rural and underserved areas of Bihar. While the infection itself can often be prevented and treated, patients who develop chronic lymphoedema may continue to suffer for many years because of delayed presentation, recurrent infections, lack of awareness, and limited access to appropriate care. I encountered a 50-year-old male farmer from rural Madhubani with longstanding swelling of both lower limbs. He had been living with the problem for nearly 10–12 years. What had initially been intermittent swelling had gradually progressed to persistent enlargement, thickening of the skin, recurrent episodes of infection, foul-smelling discharge, and difficulty in walking and working. The patient had not regularly participated in mass drug administration activities and had mainly sought treatment from local healthcare providers. Examination showed advanced chronic lymphoedema involving both lower limbs, with marked skin thickening, hyperpigmentation, verrucous changes, and involvement of the feet and toes. Peripheral smear did not demonstrate microfilariae. The case reminded me that chronic filarial disease is not simply an infectious disease problem. Once lymphatic damage becomes established, patients need continued care, education, skin and limb hygiene, prevention of recurrent infection, and regular follow-up. Working at CHC Babubarhi has further reinforced the importance of recognizing such neglected conditions at the primary healthcare level.*

Keywords: Lymphatic filariasis, Elephantiasis, Lymphoedema, Rural Bihar, Madhubani, Primary healthcare, Morbidity management

1. Introduction

Lymphatic filariasis, commonly known as elephantiasis, remains an important health problem in several parts of India, including Bihar. The disease is caused mainly by *Wuchereria bancrofti* and is transmitted by mosquitoes.

Many infected individuals may remain asymptomatic for years. However, repeated damage to the lymphatic system can eventually result in chronic lymphoedema and elephantiasis. At this stage, the problem becomes much more than swelling of a limb. Patients may develop skin changes, recurrent infections, difficulty walking, problems with daily activities, and considerable social and psychological distress.

In rural practice, these patients may present very late. The reasons are often understandable- lack of awareness, financial difficulties, distance from healthcare facilities, stigma, and reliance on local treatment.

The following case was encountered during my clinical practice as a Medical Officer at CHC Babubarhi, Madhubani, Bihar.

2. Case Presentation

Patient Profile

A 50-year-old male farmer from rural Madhubani presented with swelling of both lower limbs. According to the patient, the swelling had been gradually progressing for approximately 10–12 years.

History

The patient recalled that the problem had started with occasional episodes of fever and discomfort in the lower

limbs, followed by mild swelling. Initially, the swelling would reduce after rest.

Over the years, however, the swelling gradually became permanent. The skin became thick and rough, and the size of both legs and feet increased considerably.

He also described repeated episodes of pain, redness, local inflammation, and foul-smelling discharge. These episodes affected his ability to walk comfortably and made it increasingly difficult for him to continue his routine work as a farmer.

The patient had not regularly taken part in mass drug administration campaigns. For many years, he had sought treatment intermittently from local healthcare providers.

There was no significant history suggestive of previous major trauma or surgery involving the lower limbs.

3. Clinical Examination

On examination, both lower limbs showed marked chronic swelling, extending from the lower legs to the feet.

The following findings were noted:

- Marked thickening of the skin
- Hyperpigmentation
- Verrucous and rough skin changes
- Enlargement and deformity of the feet
- Splaying of the toes
- Features of chronic lymphoedema
- Evidence of previous/recurrent secondary infection

There was no significant generalized lymphadenopathy or other obvious systemic involvement.

The overall clinical picture was suggestive of advanced chronic lymphoedema, with filarial disease considered an important underlying cause in view of the clinical history and endemic setting.

Investigations

Routine investigations were performed.

- **Complete blood count:** Within normal limits
- **Peripheral blood smear:** No microfilariae detected
- **Ultrasonography:** Subcutaneous tissue thickening; no live adult worms demonstrated
- **Filarial antigen testing:** Not available at the time of evaluation

The absence of microfilariae on a peripheral smear did not completely exclude previous filarial infection, particularly in a patient with longstanding lymphatic damage.

Other possible causes of chronic lower-limb swelling were considered on the basis of the history and examination.

Differential Diagnosis

The main differential diagnoses considered were:

- Chronic filarial lymphoedema
- Podoconiosis
- Post-traumatic lymphoedema
- Chronic venous or lymphatic disease
- Malignancy-related lymphatic obstruction

The clinical history and examination did not provide evidence strongly suggestive of these alternative causes.

The final clinical impression was **advanced chronic lymphoedema/elephantiasis, clinically suspected to be of filarial origin.**

Management

The immediate priority was to address the skin condition and any evidence of secondary infection.

The patient was advised regarding appropriate treatment for episodes of secondary bacterial infection, together with local wound and skin care when required. Antifungal treatment was advised where clinically indicated.

He was also counselled regarding:

- Daily washing of the affected limbs
- Thorough drying, particularly between the toes
- Keeping the skin clean and moisturized
- Early treatment of cuts and wounds
- Avoiding unnecessary trauma to the affected limb
- Limb elevation while resting
- Regular gentle limb exercises
- Appropriate footwear
- Early reporting of fever, redness, pain, or sudden worsening of swelling

The patient was also counselled regarding the chronic nature of the condition and the importance of continuing limb care even when there was no acute infection.

Because microfilariae were not demonstrated and filarial antigen testing was unavailable, antifilarial treatment was not prescribed solely on the basis of chronic elephantiasis. The

patient was advised regarding appropriate follow-up and linkage with available morbidity-management services.

A Lesson from the Community

One of the most striking aspects of this case was how long the patient had lived with the condition.

For the patient, the swelling had gradually become a part of everyday life. He had adapted his activities around it rather than considering it something that required long-term medical care.

This is an important challenge in rural healthcare. Patients with chronic conditions may not seek medical attention until the disease significantly interferes with their daily lives.

In such situations, the role of a primary healthcare centre goes beyond prescribing medicines. Identification of patients, counselling, prevention of recurrent infection, education about self-care, and regular follow-up are equally important. The involvement of ASHA workers and other frontline health workers can also help in identifying people with chronic limb swelling in the community and encouraging them to seek appropriate care.

4. Discussion

Elephantiasis is one of the most visible consequences of chronic lymphatic filariasis. Unfortunately, by the time a patient develops advanced lymphoedema, much of the lymphatic damage may already be established.

A negative peripheral smear therefore does not necessarily mean that the patient's long standing lymphatic disease is unrelated to previous filarial infection.

For patients with established lymphoedema, management should focus not only on eliminating the parasite when active infection is demonstrated but also on preventing further complications. Simple measures such as regular washing and drying of the limb, proper foot care, exercise, elevation, and early treatment of acute inflammatory episodes can make an important difference.

This case also reminded me of the importance of continuity of care in rural practice. At a tertiary hospital, a patient may be seen for a particular clinical problem and then move on to the next stage of treatment. At a Community Health Centre, however, the same patient may return repeatedly, and the healthcare team has an opportunity to understand the patient's social circumstances, barriers to treatment, and long-term needs.

As a Medical Officer at **CHC Babubarhi, Madhubani**, this experience has reinforced my understanding that neglected diseases often require patience and continuity rather than a single prescription.

5. Conclusion

This case represents the long-term burden that chronic lymphatic disease can place on a patient living in a rural community.

The patient had lived with progressive bilateral lower-limb swelling for more than a decade before receiving structured medical attention. By that stage, the condition had affected his mobility, work, and everyday life.

For such patients, care does not end with treatment of an acute infection. Long-term limb care, prevention of recurrent episodes, patient education, community awareness, and regular follow-up are essential.

The experience also highlights the important role of primary healthcare facilities such as CHC Babubarhi in identifying and supporting patients with neglected chronic diseases.

Clinical Message

“In chronic filarial lymphoedema, the goal is not only to treat an infection, but also to help the patient protect the limb, prevent recurrent infections, and live with less disability.”

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