

## GENITAL ELEPHANTIASIS: SEXUALITY, DIABILITY AND REHABILITATION

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### ABSTRACT

Filariasis is the name for a group of tropical diseases caused by various species of the nematode parasites and their larvae. Elephantiasis is the important cause of disability in filariasis. About the development of elephantiasis, chronic lymphatic obstruction is the principal pathogenesis. An interesting form of elephantiasis is genital elephantiasis. In this article, the author briefly summarizes sexuality, disability and rehabilitation for genital elephantiasis.

Key words: Filariasis, sexuality, disability, rehabilitation, genital

### INTRODUCTION

Filariasis is the name for a group of tropical diseases caused by various species of the nematode parasites and their larvae. Filariasis presents with fever, cold, headache, and wronged skin in the first steps and, if no treated, it can progress to include crude enlargement of the members and the genital organs in a condition called “elephantiasis”. Several different types of towards are mentioned as the causes of filariasis but the common types include the following: *Wucheria bancrofti*, *Brugia malayi*, *Onchocerca volvulus*, *Loa loa*, *Mansonella streptocerca*, *Dracunculus medinensis*, *Mansonella pustans*, and *Mansonella ozzardi*. Elephantiasis is the important cause of disability in filariasis. About the development of elephantiasis, chronic lymphatic obstruction is the principal pathogenesis <sup>1</sup>. Although the lymphatic filariasis that is rarely fatal, the incapacity caused by the extremities swollen, the sharp attacks of adenolymphangitis and the consequent sufferings of those afflicted are considerable <sup>2</sup>. Rehabilitation is important tertiary prevention for all mosquito-borne infectious diseases. Physical, psychological and social rehabilitation should be concerned.

Lymphatic filiasis is the most common mosquito-borne infectious disease that can lead permanent disability, elephantiasis. An interesting form of elephantiasis is genital elephantiasis. In this article, the author briefly summarizes sexuality, disability and rehabilitation for genital elephantiasis.

## GENITAL ELEPHANTIASIS: HOW TO DIAGNOSE?

Genital elephantiasis (esthiomene) is an important medical problem in many developing countries<sup>3-4</sup>. Penoscrotal elephantiasis, along with enlargement of femoral lymph nodes, is classical sign and symptom<sup>5</sup>. It usually affects young and productive age group, and is associated with physical disability and extreme mental anguish<sup>3-4</sup>. The majority of cases are due to filariasis; however, a small but significant proportion of patients develop genital elephantiasis due to bacterial sexually transmitted infections, mainly lymphogranuloma venereum and donovanosis<sup>3</sup>. Laboratory investigations like microscopy of tissue smear and nucleic acid amplification test for donovanosis, and serology and polymerase chain reaction for lymphogranuloma venereum may help in the diagnosis, but in endemic areas, in the absence of laboratory facilities, diagnosis largely depends on clinical characteristics<sup>3</sup>.

## SEXUALITY IN GENITAL ELEPHANTIASIS

The silent burden of sexual disability associated with lymphatic filariasis is mentioned<sup>6-7</sup>. Vlassoff et al studied the gender and the filariasis in Africa. According to this work, gender differences in stigma scores were not significantly different for men and women, but qualitative data revealed that stigma was experienced differently by men and women, and that men and women were affected by it in distinctive ways<sup>6</sup>. In addition, men were more concerned about the impact of the disease on sexual performance and economic prospects, whereas women expressed more concern about physical appearance and life chances, specially marriage<sup>6</sup>. Gyapong et al noted that even though the disease was a problem to both men and women, men with hydrocele suffered a greater psychosocial burden. Particular attention was paid to them, distinguishing men with small hydroceles and men with large ones<sup>8</sup>. Gyapong et al also reported that unmarried men in particular found it difficult to find a spouse with their condition, and various degrees of sexual dysfunction were reported amongst married men<sup>8</sup>. In 2001, Ahorlu et al performed an interesting study using focus group discussions and in-depth interviews to determine the consequences of hydrocele and the benefits of hydrocelectomy on physical activity and social life in three lymphatic filariasis endemic villages where males had recently been offered surgical operations to repair their hydroceles<sup>9</sup>. According to this work, respondents were of the view that hydrocele, especially large ones, severely reduced the patients' work capacity and impaired sexual function, and that overall it had a considerable negative effect on the quality of living for the patients, their families and the community<sup>9</sup>. Ahorlu et al discussed for the need for hydrocelectomy to be incorporated as an important morbidity control measure in lymphatic filariasis control programs<sup>9</sup>.

## DISABILITY DUE TO GENITAL ELEPHANTIASIS

Elephantiasis is accepted as the most important cause of infectious-induced disability. Basically, the common manifestations of lymphatic filariasis like lymphedema; elephantiasis and hydrocele result from irreversible damage caused to the lymphatics by

the adult worms<sup>10</sup>. Only palliative treatment in the form of physical methods and surgery is available for lymphedema and elephantiasis<sup>10</sup>. However, hydrocele can be corrected by surgery<sup>10</sup>.

The most distressing aspect of lymphatic filariasis is the attacks of acute adenolymphangitis, which cause considerable short-term and also long-term disability by worsening the lymphedema<sup>10</sup>. Ramaiah et al studied the functional impairment caused by lymphatic filariasis assessing through qualitative and quantitative methods in rural areas of Tamil Nadu, South India<sup>11</sup>. According to this work, about 66% of the patients said that their occupational activities were hampered by the disease and the disability was worse in patients with acute disease<sup>11</sup>. Harichandrakumar et al reported that the severity scores increase with the progression of filarial disease but independent of gender<sup>12</sup>. In males, the mean score of lymphoedema was significantly higher in comparison to hydrocele<sup>12</sup>.

## REHABILITATION FOR GENITAL ELEPHANTIASIS

Progress of disability prevention activities are needed for lymphatic filariasis<sup>13</sup>. The activities should focus in bio-psycho-social approach. Morbidity management programmes should be broadened to include counseling, rehabilitation and health education to manage the psychosocial problems caused by lymphatic filariasis<sup>14</sup>. For physical rehabilitation, reconstruction of male external genitalia with elephantiasis is the most successful method<sup>15-16</sup>. The application of therapeutic exercise in elephantiasis of the extremities before surgery and during the postoperative period should be done<sup>17</sup>. Concerning the operation, the skin of the scrotal neck was found to be the best for reconstruction of the scrotum to accommodate the two testes<sup>18</sup>. The fascial penis is an ideal bed for intermediate split-thickness skin grafts<sup>18</sup>. Dandapat et al reported that there was mechanical improvement in the physical disability, restoration of potency and sexual habits, and reduction of mental anguish<sup>18</sup>. For the cases that do not already get the surgical treatment, the most distressing aspect of lymphatic filariasis is the attacks of acute adenolymphangitis, which cause considerable short-term and also long-term disability by worsening the lymphedema<sup>10</sup>. The precipitating cause of these attacks is secondary infection, the bacteria entering the tissues through the skin, therefore, these episodes can very well be prevented by proper 'local-hygiene' of the affected limbs, which is a simple, effective, cheap and sustainable method that can be carried out even in the patient's house<sup>10</sup>.

## CONCLUSION

Lymphatic filiasis is the most common mosquito-borne infectious disease that can lead permanent. An interesting form of elephantiasis is genital elephantiasis. Sexuality and disability relating to filariasis is a very interesting issue. Those issues are already concluded and presented in this review. Also, additional comments on rehabilitation of genital elephantiasis are also presented.

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