ORIGINAL RESEARCH PAPER

Volume-8 | Issue-4 | April-2019 | PRINT ISSN No 2277 - 8179

INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH

STUDIES ON VISCERAL LEISHMANIASIS IN DARBHANGA REGION: EPIDERNIOLOGICAL PERSPECTIVES

Zoology

Arti Kumari Research Scholar, Zoology, L.N. Mithila Universiity, Darbhanga

ABSTRACT

Visceral leishmaniasis (VL), also known as kala-azar, black fever, and Dumdum fever, is the most severe form of leishmaniasis and, without proper diagnosis and treatment, is associated with high fatality. Leishmaniasis is a disease caused by protozoan parasites of the genus Leishmania. The parasite migrates to the internal organs such as the liver, spleen (hence "visceral"), and bone marrow, and, if left untreated, will almost always result in the death of the host. Signs and symptoms include fever, weight loss, fatigue, anemia, and substantial swelling of the liver and spleen. This disease is the second-largest parasitic killer in the world (after malaria), responsible for an estimated 20,000 to 30,000 infections each year worldwide. Progress of the disease is extremely variable, taking anywhere from one to twenty weeks, but a typical duration for the Sudanese strain of the disease is narrower, between twelve and sixteen weeks. Even with recovery, kala-azar does not always leave its hosts unmarked. Sometime after successful treatment—generally a few months with African kala-azar, or as much as several years with the Indian strain—a secondary form of the disease may set in, called post kala-azar dermal leishmaniasis, or PKDL. This condition manifests first as small, measle-like skin lesions on the face, which gradually increase in size and spread over the body. Eventually the lesions may coalesce to form disfiguring, swollen structures resembling leprosy, and occasionally causing blindness if they spread to the eyes. (This disease is not the same as cutaneous leishmaniasis, a milder disease caused by another protozoan of the Leishmania genus which also causes skin lesions. This paper is focused upon the studies of Visceral Leishmaniasis.

KEYWORDS

Kala-azar, PKDL, Visceral Leishmaniasis

INTRODUCTION

Visceral leishmaniasis (VL), popularly called Kala-azar, is a vector-borne disease in man caused by a protozoan parasite **Leishmania donovani** (kinetoplastida: flagellata: zoomastigophora). It is one of the major communicable disease in man only next to Malaria. Today it is a far abundant and popular public health problem of considerable magnitude, rather more- or-less a global problem (WHO, 1990). Recently WHO has recognized this disease as one of the major seven tropical and communicable diseases of human beings. The disease is a silent killer disease and though having a low mortality rate but high morbidity it has immense socio-economic impact, particularly on rural-based and poor population. The disease has a long 'unapparent or sub-clinical' symptoms and only clinical diagnosis of the disease is followed by treatment for cure which becomes longer and even costly too. If inadequately treated or cared, it may become fatal too. Thus, it is a severe form of leishmaniasis.

Remarkably enough Kala-azar (VU has been declared a disease of poor and rural-based population, particularly in the developing or under- developed Asian/African countries, such as India, Pakistan, B' Desh, Nepal and Sudan, Kenya and soon. in India , presently North Bihar has been an endemic area of VL (Lewis, 1978). Further in North Bihar Darbhanga region is a risk zone for the disease. As such it becomes pertinent to identity the 'risk factors' in the endemic area that are responsible for 'inapparent/sub-clinical' and even incubating state of the disease for the success of effective control programmes. Otherwise, chances of relapse and unresponsiveness to the currently available anti-leishmaniasis become realistic and uncontrollable (Thakur, 1996). Rather it has been stressed that incidence/cases of Kala-azar suffer from underreporting and as such exactitude of the control strategies fails to meet the desired level of success.

Considering such perspectives in mind the present investigation was proposed to be undertaken with a view to assessing the fctors/conditions which are responsible for rendering this disease as endemc or hyper-endemic as well as locality of the disease incidence in this part of North Bihar - Darbhanga region, which has recently been witnessing serious alarming situations in relation to Kala-azar disease.

Objectives

The present investigation has been aimed at following objectives:-

- To identify focal areas of disease in the rural/urban part of Darbhanga region.
- To identify the probable risk factors for the endemicity as well as the disease prevalence in the area of study.
- To obtain data on the disease prevalence in relation to age, sex, occupational habits, households characteristics, etc. (demographic features) of human population of the area.

Significance

It is hoped that the findings of present investigation will definitely add to the information so far available through earlier works in Bihar, and thus may be useful in evolving strategic control and prevention measures as to reduce the burden of a public health problem.

Work Plan

To achieve the objectives as above work-plan has been designed as:

- To collect data from the records available through PHCs, dispensaries and Hospitals with regard to disease incidence in rural and urban population month wise.
- House-to-house survey through well designed questionnaire for information with regard to age, sex, occupation, household characteristics, socio-economic status, etc. and also about the measures taken so far.

REFERENCES

1. Lewis, D. J. (1978), Phi ebotomine sandflies of the oriental region, Bull, Bri. Mus.Nat. Hist. Entomology Ser. p37
2. ibid. p. 217
3. Lainson, R. (1983), The Leishmoniasis as a global health problem, Proc. Ind-UK Workshop on Leishmaniasls, p 20
4. ibid. p. 35
5. Thakur, B. B (1996), Clinical profile of Kala-azar in India, Proc. I Global Meet on Parasit. DIs, p. 36
6. W.H.O. (1990), Technical series on Leishmaniasis, Geneva.
7. W.H.O. (1996), Control of the Leishmaniasis: a technical report series, Geneva. p.93
8. ibid. p.158
9. www.wikipedia.org