

## International Journal of Mosquito Research

ISSN: 2348-5906

CODEN: IJMRK2

IJMR 2023; 10(6): 173-176

© 2023 IJMR

<https://www.dipterajournal.com>

Received: 10-09-2023

Accepted: 07-11-2023

**Dr. Pallavi Ghadage**

Associate Professor,

Department of Kaya Chikitsa,

LN Ayurved College and

Hospital, LNCT University,

Bhopal, Madhya Pradesh, India

**Dr. Govardhan Sahani**

Associate Professor,

Department of Shalya Tantra,

Sri Sairam Ayurveda Medical

College and Research Centre,

Chennai, Tamil Nadu, India

**Dr. Bala Sundar**

Associate Professor, Department

of Dravya Guna, Sri Sairam

Ayurveda Medical College and

Research Centre, Chennai, Tamil

Nadu, India

**Dr. Antony Stephen Raj**

Associate Professor,

Department of Kriya Sharira,

Sri Sairam Ayurveda Medical

College and Research Centre,

Chennai, Tamil Nadu, India

**Dr. Arun Prakash**

Associate Professor,

Department of Roga Nidana,

Sri Sairam Ayurveda Medical

College and Research Centre,

Chennai, Tamil Nadu, India

**Dr. Faiz Mohammed**

Associate Professor,

Department of Rachana Sharira,

Sri Sairam Ayurveda Medical

College and Research Centre,

Chennai, Tamil Nadu, India

**Corresponding Author:**

**Dr. Govardhan Sahani**

Associate Professor,

Department of Shalya Tantra,

Sri Sairam Ayurveda Medical

College and Research Centre,

Chennai, Tamil Nadu, India

## Ayurvedic insights into lymphatic filariasis and holistic approaches towards its management

**Dr. Pallavi Ghadage, Dr. Govardhan Sahani, Dr. Bala Sundar, Dr. Antony Stephen Raj, Dr. Arun Prakash and Dr. Faiz Mohammed**

**DOI:** <https://doi.org/10.22271/23487941.2023.v10.i6c.731>

### Abstract

Lymphatic Filariasis (LF) is a debilitating and neglected tropical disease caused by thread-like parasitic worms belonging to the family Filaridea which is either by *Wuchereria bancrofti* or *Brugia malayi*. It is transmitted through mosquito vectors like ubiquitous mosquito species *Culex quinquefasciatus* and *Mansonia annulifera* respectively. The global burden of LF, with a focus on endemic regions, is discussed along with the socioeconomic implications of the disease. In Ayurveda, Lymphatic Filariasis can be correlated with Sleepada which was mentioned in 6<sup>th</sup> B.C by Acharya Susruta in his treatises. Ayurveda with its holistic approach to health and disease, provides a unique lens through which to view the complexities of LF, with its different modalities of treatment among which nithyanandha rasa has a significant role in reducing the signs and symptoms of the disease.

**Keywords:** Ayurveda, filariasis, nithyanandha rasa, sleepada, wuchereria bancrofti

### Introduction

Lymphatic filariasis (LF) is a debilitating and the most significant neglected tropical vector-borne disease (VBD) world-wide [1]. LF stands as a significant global health challenge, particularly in tropical and subtropical regions. It is caused by thread-like parasitic worms belonging to the family Filaridea. There are three types of thread-like worms in which *Wuchereria bancrofti* causes 90% of the total disease followed by *Brugia malayi* and *Burgia timori* [2]. It is transmitted through different types of mosquitoes like *Culex*, which is widespread in urban and semi-urban areas [3]. According to the World Health Organization (WHO) classified this parasitic infection as the second most common cause of long-term disability after mental illness [4]. Incidence and prevalence shows about 95% of the cases in India were in Tamil Nadu, Kerala, Andhra Pradesh, Bihar, Orissa, Gujarat, Maharashtra, West Bengal, and Uttar Pradesh [5]. The global burden of LF, with a focus on endemic regions, is discussed along with the socioeconomic implications of the disease.

Ayurveda which has been a holistic medicine for ages correlates Lymphatic Filariasis as Sleepada which is divided into two words Slee (Elephant) and Pada (Leg or foot) refers to Elephant leg- like condition. For ages the term Sleepada has been revolving around Ayurvedic treatises. Acharya Susruta in his treatise has explained clearly about the Nidana, Purva roopa, Lakshanas, and Chikitsa [6]. Even there is a trace of explanation available in Charaka Samhita, Ashtanga Hridaya, and Bhaishajya Ratnavali. Sleepada affects the Rohini [7] which is the sixth layer of skin and is categorised under krimi roga. Sleepada arises from the water of Paariyaatra, Sahya, Vindhya [8], Mahendra Parvath, and Himavat Parvath [9] and mainly develops in Puranodaka (Old stagnated water), Sarva Ritu Sheetala (cold weather continuously) which causes vitiation of all three doshas and leads to Adhogamana of Prakupita Doshas which get localized in vankshana(Groin), URU (Thigh), Janu (Foreleg), Janga (calves) and gradually reaches to the foot giving rise to Shopha associated with Arati (Pain), Jwara (Pyrexia) and turns hard in consistency [10]. Sleepada which is kapha pradana vyadhi (Predominant disease), consists of three types Vataja, Pitaja, and Kaphaja which causes heaviness and increase in Size of Pada (Leg) [11].

The Sotha (Swelling) growing upwards like ant-hill with many sprouts, that which is more than one year old and that which is very big is to be rejected for treatment [12].

**Aim and Objective**

To review and analyse the concept of Sleepada and its management through Ayurveda.

**Materials and Methods**

Different notions of Sleepada have been swotted, compiled from all the available Ayurvedic tretise, national, and International Journals, Pub Mate, and relevant internet

sources.

**Nidana (Causative factor) [13]**

- Anupadesha (Wet lands).
- Sheeta Kala (Cold Climate).
- Dusta Jala Sevana (Intake of Contaminated Water).
- Kaphakara Ahara and Vihara (Food and Activities which increases).
- Kapha Dosha Prakopa Ahara like Matsya [14], Dadhi [15] etc.

**Lakshanas (Symptoms)**

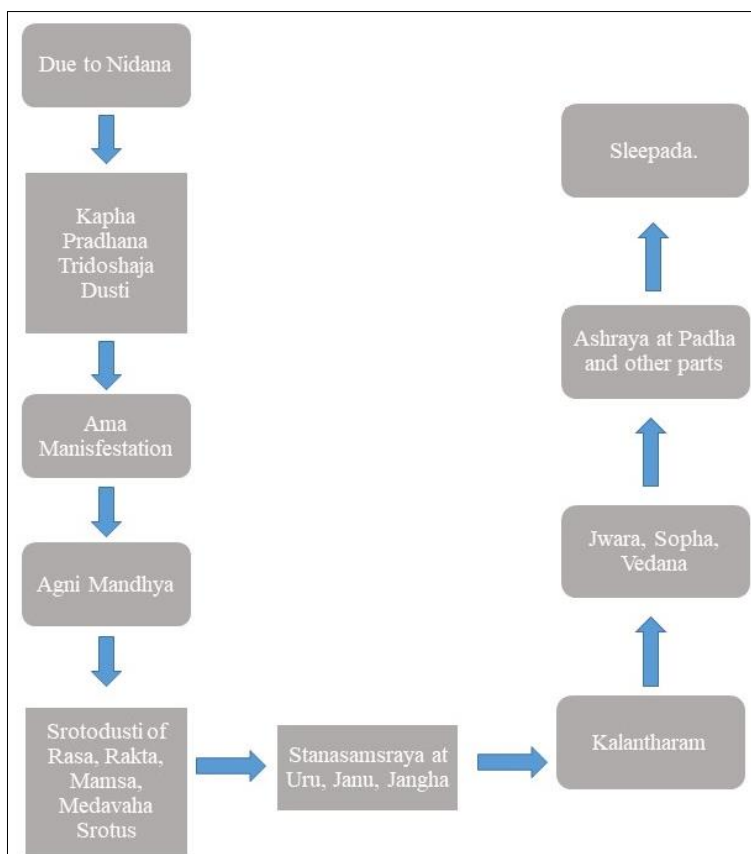
**Table 1:** Shows three types of Sleepada with its Samanya and Vishesha Lakshanas

S. No.	Ayurvedic Treaties	Vataja Sleepada	Pittaja Sleepada	Kaphaja Sleepada
1.	Susruta Samhita [16]	Khara, Krishna, Paroosha, Animitta Anila Ruja.	Pitavabhasa, Mridu, Daha, Jwaram.	Swetha varna, Mandhavedana, Bharika Mahagranthikam,
2.	Ashtanga Hridaya [17]	Paripotayuta, Krishna, Annimitta, Ruksha, Khara.	Pita twak varna, Daha, Jwara.	Mamsa Ankurabruha, Guru, Snigham.
3.	Madava Nidana [18], Bhavaprakasha [19], Yogaratnakara [20].	Teevara Vedana, Ruksha, Sphutita.	Daha, Jwara, Mridu Sotha, Pita Sankasham.	Pandu, swetha varna, Sthira, Guru, Sthiram.

**Samprapti (Pathogenesis) [21-23]**

Due to the Nidana, all three doshas get vitiated in which kapha is predominant. Due to this, Agni gets mandhya leading to AMA. This further causes srotodusti of Rasa, Rakta,

Mamsa, and Medovaha Srotus and be seated at Uru, Janu, and Jangha. Gradually the symptoms like Jwara, Sopha, and Vedana start and finally seated at Legs and form the disease called Sleepada.



**Fig 1:** Flow chart no 1 shows the Samprapti of Sleepada

**Samprapti Ghatakas [24] (Components of Pathogenesis)**

- Dosha- Kapha Pradhana Tridosha.
- Dushya - Rasa, Rakta, Mamsa, Medas, Lasika.
- Srotas - Rasavaha, Raktavaha, Mamsavaha, Medovaha.
- Adhithana - Twak, Vankshana, Uru, Jaanu, Jangha.

- Srotodushti - Sanga, Vimargagamana.
- Swabhava - Chirakari.
- Agni - Jatharagnijanya Mandhya, Dhatvagnijanya Mandhya.
- Ama - Jatharagnijanya Ama, Dhatvagnijanya Ama.

- Udbhava Sthana - Amashaya.
- Sanchara Sthana - Sarva Sharira.
- Vyakta Sthana - Adhobhaga Shopha, Karna, Netra, Shishna, Oshtha, and Nasa Gata Shopha.
- Rogamarga - Bahya.

### Chikitsa (Treatment)

In classical Ayurvedic texts, different types of treatment are available which includes both internal as well as external treatment modalities. Acharya Charaka has mentioned Siravedhana<sup>[25]</sup> (Puncturing of vein) at the affected side.

Acharya Susruta has mentioned Raktamoksha<sup>[26]</sup> (Bloodletting) for vataja four angulas above the ankle, for pittaja below the gulphasandhi, for kaphaja prominent vein at the big toe should be punctured. According to Bhavaprakasha, the line of treatment includes Langana (Fasting), Swedana (Fomentation), Virechana (Purgation), Raktamokshana (Bloodletting), Lepa act as Kaphahara (Reduces the kapha dosha), and Ushna Upacharas (Heat Therapy)<sup>[27]</sup>. According to Sharangadhara Intake of Shakhotaka Valka Kwatha (Decoction of *Streblus asper*) along with Gomutra relieves Sleepada.

**Table 2:** Shows some of the effective formulations available for sleepada

Kashayas	Curnas	Tailam	Ghritas	Compound Formulations
Noonganadhi kashayam	Rajani curna	Noongandhai Eranda Tailam.	Panchanan Ghrita	Nityanandha rasa
Guggulu tiktaka kashyam	Vridha Daruka Curna	Panchanan tailam	Vridha daruka Ghrita	Sleepadari loha
Bharngyadi kashayam	Pippalyadi Curna	Vidangadi tailam.	Saureswara Ghrita	Krishna moodakam.
Shakhotaka kashyam + gomutra.	Sudarshana Curna	Eranda taila + Gomutra		Slipadari loha, Shakhotaka Vati, Guda Haridra.

### Conclusion

Ayurveda which is one of the oldest traditional medicines approaches diseases and management differently. Even though the pathophysiological conditions were not known, Ayurveda has clearly explained Sleepada which can be correlated with Lymphatic Filariasis with its signs and symptoms. Here Ayurveda gives us promising results even though the condition becomes worse.

### References

1. Perspectives of Indian medicinal plants in the management of lymphatic filariasis published by ICMR, Govt. Of India, New Delhi; c2012.
2. Medeiros ZM, Vieira AVB, Xavier AT, Bezerra GSN, Lopes MFC, Bonfim CV, *et al.* Lymphatic Filariasis: A Systematic Review on Morbidity and Its Repercussions in Countries in the Americas. *Int. J Environ Res. Public Health.* 2021 Dec 28;19(1):316.
3. Park K. *Parks Textbook of Preventive and Social medicine.* 18<sup>th</sup> Ed. Banarsidas Bhanot; Jabalpur; c2005.
4. Gordon S, Melrose W, Warner J, Buttner P, Ward L. Lymphatic Filariasis: A Method to Identify Subclinical Lower Limb Change in PNG Adolescents. *PLoS Negl. Trop. Dis.* 2011;5:e1242.
5. Pani SP, Kumaraswami V, Das LK. Epidemiology of lymphatic filariasis with special reference to urogenital manifestation. *Indian Journal of Urology.* 2005;21(1):44.
6. Susruta. *Susruta Samhita with Ayurveda Tattva Sandipika Hindi Commentary by Kaviraja Ambikadutta Shastri on Susruta Samhita of Maharsi Susruta.* Nidanasthana 12/13, 15-18. Reprint Ed. Varanasi: Chaukhambha Publications; c2005. p. 280-281.
7. Susruta. *Susruta Samhita with Ayurveda Tattva Sandipika Hindi Commentary by Kaviraja Ambikadutta Shastri on Susruta Samhita of Maharsi Susruta.* Sharirasthana 4/4. Reprint Ed. Varanasi: Chaukhambha Publications; c2005. p. 28-9.
8. Agnivesha, Charaka, Dridabala, Acharya YT. *Charaka Samhita with Ayurveda Deepika Commentary by Chakrapanidutta on Charaka Samhita of Agnivesha.* Chikitsasthana 27/212. 4<sup>th</sup> Ed. Varanasi: Chaukhambha Publications; c1994. p. 164.
9. Susruta. *Susruta Samhita with ayurveda Tattva Sandipika hindi commentary by Kaviraja Ambikadutta Shastri on Susruta Samhita of Maharsi Susruta.* Sutrasthana 45/21. Reprint Ed. Varanasi: Chaukhambha Publications; c2005. p. 170.
10. Susruta. *Susruta Samhita with ayurveda tattva sandipika hindi commentary by Kaviraja Ambikadutta Shastri on Susruta Samhita of Maharsi Susruta.* Nidanasthana; 12/13, 1518. Reprint Ed. Varanasi: Chaukhambha Publications; c2005. p. 280-281.
11. Madhava. *Madhavanidanam with Madhukosa Sanskrit Commentary by Srivijayaraksita and Srikanthadatta on Madhavanidanam of Sri Madhavakara.* 39/1. 22<sup>nd</sup> Edition. Varanasi: Chaukhambha Publications; c1993. p. 77.
12. Madhava. *Madhavanidanam with Madhukosa Sanskrit Commentary by Srivijayaraksita and Srikanthadatta on Madhavanidanam of Sri Madhavakara.* 39/4. 22<sup>nd</sup> Ed. Varanasi: Chaukhambha Publications; c1993. p. 79.
13. Vagbhata. *Astangahridaya with Nirmala Hindi Commentary by Brahmanand Tripathy.* Uttaratantra. 29/22. First Edition. Varanasi: Chaukhambha Sanskrit Series Office; c1999. p. 1102.
14. Agnivesha, Charaka, Dridabala, Acharya YT. *Charaka Samhita with Ayurveda Deepika Commentary by Chakrapanidutta on Charaka Samhita of Agnivesha.* Chikitsasthana 27/82. 4<sup>th</sup> Ed. Varanasi: Chaukhambha Publications; c1994. p. 158.
15. Bhela A. *Bhela samhita text with English translation commentary and critical notes by Dr. KH Krishnamurthy on Bhele samhita.* Sutrasthana. 27/2. Reprint Ed. Varanasi: Chaukhambha Surbharati Prakashan; c2008. p. 119.
16. Susruta. *Susruta Samhita with ayurveda tattva Sandipika Hindi Commentary by Kaviraja Ambikadutta Shastri on Susruta Samhita of Maharsi Susruta.* Nidanasthana; 12/14. Reprint Ed. Varanasi: Chaukhambha Publications; c2005. p. 281.
17. Vagbhata. *Astangsamgraha with Sasilekha Sanskrit Commentary by Indu and of Hemadri by Dr Shivprasad Sharma on Astangsamgraha of Vahata or Vrddha Vagbhata.* Uttaratantra. 34/18-20. First Ed. Varanasi:

- Chaukhambha Sanskrit Series Office; c2006. p. 806.
18. Madhava. Madhavanidanam with Madhukosa Sanskrit Commentary by Srivijayaraksita and Srikanthadatta on Madhavanidanam of Sri Madhavakara. 39/23. 22<sup>nd</sup> Edition. Varanasi: Chaukhambha Publications; c1993. p. 77-78.
  19. Bhavaprakasa. Bhavaprakasa Edited with Vidyotini Hindi Commentary by Bhisagratna Pandit Sri Brahma Sankara Misra on Bhavaprakasa of Sri Bhavamisra. Part 2; Shleepadadhikara 45/3-5. 8<sup>th</sup> Ed. Varanasi: Chaukhambha Publications; c2003. p. 453.
  20. Yogaratnakara with Vaidyaprabha Hindi commentary by Indradev Tripathi and Dr. Daya Shankar Tripathi. Shleepada Nidana Chikitsa Prakaran 3-5, 9. First Ed. Varanasi: Choukhamba Publishers; c1998. p. 594-595.
  21. Rathod. Literary Review on Etiopathogenesis of Shleepad with references to Elephantiasis. WJPR. c2018;7(1):1446-1450.
  22. Yogaratnakara with Vaidyaprabha Hindi commentary by Indradev Tripathi and Dr. Daya Shankar Tripathi. Shleepada Nidana Chikitsa Prakaran 2. First Ed. Varanasi: Choukhamba Publishers; c1998. p. 594.
  23. Madhava. Madhavanidanam with Madhukosa Sanskrit Commentary by Srivijayaraksita on Madhavanidanam of Sri Madhavakara. 39/2-3. 22<sup>nd</sup> Edition. Varanasi: Chaukhambha Publications; c1993. p. 77-78.
  24. Gupta M, Jayaraman Krishna M, Rashmi Pujar, Gopikrishna S. A Critical Appraisal on Shleepada in Ayurveda Published in International Journal of Trend in Scientific Research and Development (IJTSRD), ISSN: 2456-6470. 2020 Feb;4(2);760-765.
  25. Samhita AC. Chikitsasthana, 12<sup>th</sup> Chapter, Edited by Vaidya Jadavji Trikamjiacharya, published by Chowkhambha Prakashan Varanasi; c2009. p. 490.
  26. Susruta. Susruta Samhita with Ayurveda Tattva Sandipika Hindi Commentary by Kaviraja Ambikadutta Shastri on Susruta Samhita of Maharsi Susruta. Chikitsasthana; 19/52, 54, 56, 65. Reprint Ed. Varanasi: Chaukhambha Publications; c2005. p. 92.
  27. Bhavaprakasa. Bhavaprakasa Edited with Vidyotini Hindi Commentary by Bhisagratna Pandit Sri Brahma Sankara Misra on Bhavaprakasa of Sri Bhavamisra. Part 2, Shleepadadhikara 45/3-5. 8<sup>th</sup> Ed. Varanasi: Chaukhambha Publications; c2003. p. 453.
  28. Sharangdhara Samhita of Acharya Sharangadhara jivanprada with Hindi commentary by Dr. Smt Shailaja Srivastava, Madhyama Khanda; Dwitiya Adhyaya verse 127. 3<sup>rd</sup> Ed. Varanasi: Choukhamba orientalia; c2003. p. 154.