

## The Role of Ayurveda in Avoidable Blindness


Hamsaveni V<sup>1\*</sup>, Bindushree SB<sup>2</sup>, Aloni K<sup>3</sup>

DOI:10.21760/jaims.10.9.21

- <sup>1\*</sup> Hamsaveni V, Professor, Department of Shalakya Tantra, Shri Kalabyraveswaramwamy Ayurvedic Medical College Hospital and Research Center, Bengaluru, Karnataka, India.
- <sup>2</sup> Bindushree SB, Post Graduate Scholar, Department of PG studies in Shalakya Tantra, Shri Kalabyraveswaramwamy Ayurvedic Medical College Hospital and Research Center, Bengaluru, Karnataka, India.
- <sup>3</sup> Kasturi Aloni, Post Graduate Scholar, Department of PG studies in Shalakya Tantra, Shri Kalabyraveswaramwamy Ayurvedic Medical College Hospital and Research Center, Bengaluru, Karnataka, India.

Blindness, as defined by the World Health Organization (WHO), and adopted by the National Programme for Control of Blindness (NPCB) in India, is a significant public health concern. Conditions such as Vitamin A deficiency in children, cataracts, glaucoma, diabetic retinopathy, age-related macular degeneration (ARMD) and various ocular injuries are major contributors. Despite the high prevalence, notably with India housing one-third of the world's blind population, up to 80% of blindness is preventable or treatable. Ayurveda, particularly through Shalakya Tantra, emphasizes the importance of eye care and offers a holistic approach to preventing blindness. This article reviews the role of Ayurvedic principles in managing key eye diseases, drawing from classical texts and contemporary medical literature. The study highlights the potential of Ayurvedic practices in preventing avoidable blindness, advocating for their integration into modern ophthalmic care to enhance both preventive and therapeutic outcomes.

**Keywords:** Blindness, Kriya Kalpa, Timira, Nayanabhighata, Adhimantha

Corresponding Author	How to Cite this Article	To Browse
Hamsaveni V, Professor, Department of Shalakya Tantra, Shri Kalabyraveswaramwamy Ayurvedic Medical College Hospital and Research Center, Bengaluru, Karnataka, India. Email: <a href="mailto:vimalbut@gmail.com">vimalbut@gmail.com</a>	Hamsaveni V, Bindushree SB, Aloni K, <i>The Role of Ayurveda in Avoidable Blindness</i> . J Ayu Int Med Sci. 2025;10(9):139-145. Available From <a href="https://jaims.in/jaims/article/view/4697/">https://jaims.in/jaims/article/view/4697/</a>	

**Manuscript Received**  
2025-07-16

**Review Round 1**  
2025-07-28

**Review Round 2**  
2025-08-08

**Review Round 3**  
2025-08-18

**Accepted**  
2025-08-28

**Conflict of Interest**  
None

**Funding**  
Nil

**Ethical Approval**  
Not required

**Plagiarism X-checker**  
10.36

**Note**



© 2025 by Hamsaveni V, Bindushree SB, Aloni K and Published by Maharshi Charaka Ayurveda Organization. This is an Open Access article licensed under a Creative Commons Attribution 4.0 International License <https://creativecommons.org/licenses/by/4.0/> unported [CC BY 4.0].



## Introduction

The World Health Organization (WHO) defines blindness as having a visual acuity of less than 3/60 (Snellen) or its equivalent, including the inability to count fingers in daylight at 3 meters and a visual field of less than 10 degrees. The National Programme for Control of Blindness (NPCB) in India adopts these criteria and highlights conditions like Vitamin A deficiency in children, Cataracts, Glaucoma, and Diabetic retinopathy in middle age, and Age-related macular degeneration (ARMD) in older adults as significant causes. Blindness is often preventable or treatable through timely interventions, such as surgical procedures for cataracts. Estimates indicate that one out of every three blind people in the world lives in India, with around 15 million blind individuals. Annually, 3 million people in India develop cataracts, and the country has about 2 million blind children, with only 5% receiving education. Additionally, between 25-33% of individuals over 65 experience functional vision loss, with 65-70% of the legally blind being over 65. Notably, up to 80% of blindness is curable or preventable.

*Ayurveda*, particularly through its branch of *Shalakya Tantra*, stresses the importance of eye care. It aims to maintain health and cure diseases in individuals. Ancient Ayurvedic texts emphasize that vision is crucial, providing over 90% of human knowledge. Ayurveda recommends continuous efforts to protect eyesight, noting that without vision, even the wealthy find life dark and meaningless.<sup>1</sup> This article focuses on key eye diseases such as cataracts, diabetic retinopathy, childhood blindness, ARMD, and refractive errors, and explores how *Ayurvedic* practices can help in preventing blindness.

## Objectives of the study

The primary aim of this study is to conduct a literary review on the different preventive measures mentioned in Ayurveda to prevent avoidable blindness.

## Materials and Methods

This study involved a comprehensive review of various Ayurvedic texts and Contemporary textbooks on ophthalmology, medical journals,

And published articles were also studied to extract and explain all relevant points pertaining to the prevention of avoidable blindness.

### Preventable Ocular Disorders and Ayurvedic Perspective

**1. Cataract** is a major cause of visual impairment, responsible for 50% of global blindness and affecting 17.7 million people. In India, it accounts for 80% of blindness. Key risk factors include UV exposure, diabetes, hypertension, BMI, drug usage, smoking, socioeconomic factors, and aging. Cataract, an opacity in the lens, often results from decreased Na<sup>+</sup>/K<sup>+</sup> ATPase concentration, leading to water imbibition in lens fibres. There are no effective preventive drugs, but early-stage treatments include iodide salts of calcium and potassium, vitamin E, and aspirin. Cataract surgery is recommended in advanced stages.

**2. Diabetic retinopathy (DR)** is a significant complication of diabetes mellitus (DM) and a leading cause of vision loss among diabetics. The likelihood of developing DR increases with the duration of diabetes: within 10 years, 20% of type 1 and 25% of type 2 diabetics develop retinopathy; these percentages rise to 90% for type 1 and 60% for type 2 after 20 years, and to 95% for both types after 30 years. DR primarily affects small blood vessels in the eye, leading to microvascular occlusion and leakage. Ayurveda correlates DR with *Madhumehajanya Timira*. Preventive and treatment measures include screening, managing diabetes, laser photocoagulation, intravitreal anti-VEGF drugs, intravitreal steroids, and surgical interventions. However, lost vision cannot be restored.

**3. Age-related macular degeneration (ARMD)**, also known as senile macular degeneration, is prevalent in people over 65 years old, with around 200 million affected globally, a number expected to rise to nearly 300 million by 2040. Research indicates that ARMD and age-related cataracts develop due to oxidative stress.

Preventive and treatment measures specially recommended is AREDS 2, include taking 500 mg of vitamin C, 400 mg of vitamin E, 10 mg of lutein, 12 mg of zeaxanthin, 25-50 mg of zinc, and 2 mg of copper. Additional measures include quitting smoking, avoiding excessive sunlight exposure, and regularly consuming oily fish and green leafy vegetables.

#### 4. Childhood blindness\_

Is predominantly caused by vitamin A deficiency in developing countries, affecting around 1.5 million children globally. Each year, approximately 500,000 children go blind due to this deficiency. Preventive measures include vitamin A supplements given at 9 months (100,000 IU), 18 months (200,000 IU), and 2 years of age (200,000 IU). Dietary sources of vitamin A include plant-based carotenes (carrots, legumes, nuts, seeds, spinach, pomegranate) and animal-based retinols (milk products, animal liver).

**5. Refractive errors**, such as myopia, hypermetropia, and astigmatism, are frequently observed among school-going children, with about 15% affected by myopia. Treatments for these conditions include the use of concave lenses for myopia, convex lenses for hypermetropia, and cylindrical lenses for astigmatism. Preventative measures involve maintaining visual hygiene, adopting a proper reading posture, ensuring adequate lighting, using clear print materials, avoiding continuous reading at night, minimizing excessive near work, and limiting the use of electronic devices.

While contemporary ophthalmology offers palliative management to prevent blindness from the disorders mentioned above, Ayurveda provides a complementary approach by comparing these diseases with the *Lakshanas* of *Timira* and its types. Integrating Ayurvedic treatments with modern practices can offer a holistic approach to eye care and prevention of avoidable blindness.

#### **Timira**

*Timira* is identified in *Ayurvedic* classics as a significant vision-impairing disorder and is categorized under *Drishtigata Rogas* (diseases affecting vision). It serves as a broad term encompassing various ocular conditions marked primarily by blurred or diminished vision.

Phrase "*Timi Kledane Aardri Bhavaha*" suggests an abnormal increase in moisture within the ocular structures. If not addressed in time, *Timira* can progress gradually - from initial stages of visual disturbance i.e., *Timira*, to the development of *Kacha*, and ultimately to *Linganasha*, which signifies complete loss of vision. According to *Acharya Vagbhata*, the management of *Timira* is primarily based on the predominance of the vitiated *Doshas*.

A multidimensional treatment protocol is adopted, incorporating both *Shodhana* (bio-purificatory) and *Shamana* (palliative) therapies. The therapeutic modalities include *Snehana* (oleation), *Swedana* (sudation), *Raktamokshana* (bloodletting), *Virechana* (purgation), *Nasya* (nasal therapy), *Anjana* (collyrium), *Basti* (medicated enema), *Tarpana* (nourishing eye therapy), *Lepa* (topical application), and *Seka* (eye irrigation).[2]

*Snehapana*, *Nasya*, and *Tarpana* serve as primarily therapeutic approaches in the early stages of *Timira*. These treatments involve the use of specifically formulated medicated ghee preparations including: *Purana Ghrita*, *Triphala Ghrita*, *Mahatriphala Ghrita*, *Jivantyadi Ghrita*, *Drakshadi Ghrita*, and *Patoladi Ghrita*, used due to their *Chakshushya* and *Rasayana* properties.

#### **Raktamokshana (Bloodletting)**

Indicated particularly in *Prathama* and *Dwitiyapatala-gata Timira*. It is performed on the *Bhruupari* (area above the eyebrows) or *Lalata* (forehead) after prior administration of *Snehana* and *Swedana* (sudation therapy).

#### **Virechana (purgation)**

*Dosha* - Specific purgation is used:

- *Vataja Timira*: Castor Oil with Milk
- *Pittaja Timira*: *Go-Ghrita* with *Triphala*, *Sharkara*, *Ela*, *Trivrit Churna* with Honey
- *Kaphaja Timira*: Decoctions of *Trivrit* or A Combination of *Puga*, *Abhaya*, *Shunti*, *Pippali*, *Trivrit* and

#### **Nasya (Nasal Therapy)**

Especially effective during the initial stages when symptoms are localized and have not affected the entire eye, *Nasya* is typically combined with *Virechana* and *Basti* in more advanced cases.

#### **Basti Karma**

Both *Niruhabasti* (decoction enema) and *Anuvasanabasti* (oil enema), especially those mentioned in *Vataja Peenasa* treatment like *Madhutailika Basti* and *Sthiradi Niruha Basti*, are beneficial for *Timira* management.

#### **Aschyotana (Eye Drops)**

An early-stage intervention useful before significant *Dosha* vitiation.

### Anjana (Collyrium)

Indicated in the *Nirama Avastha*. Examples include *Kusumika Varti Anjana*, *Drushtiprada Varti Anjana*, and *Chandrodaya Varti Anjana*.

### Tarpana (Ocular Rejuvenation)

Using medicated ghee preparations like *Triphalaghrita*, *Mahatriphalaghrita*, *Patoladighrita*, and *Drakshadighrita* helps nourish and rejuvenate ocular tissues.

### Role of Triphala in Timira

*Triphala* plays a pivotal role in *Timira* management.

For *Vataja Timira* : Combined with *Taila* (oil)

For *Pittaja* and *Raktaja Timira* : Taken with ghee

For *Kaphaja Timira* : Mixed with honey, A combination of *Triphala*, *Yashtimadhu*, and *Madhu* taken at bedtime for a month improves vision.[3]

Internal administration can include combinations with *Anupamamsa Supa*, *Saktu*, *Go-Ghrita* (stored in an iron vessel), *Draksha*, *Sharkara*, *Madhu*, or even *Bhasma* of *Suvarna* (gold), *Rajata* (silver), or *Loha* (iron) with ghee and honey. Regular intake of *Triphala* with *Ghrita* enhances absorption and efficacy,[4] especially when taken with *Tapya* or *Ayaschurna*, stored in black gram for a month before use.

It can also be combined with *Mridwika*, *Sharkara*, or *Madhu* and taken over a month to promote healthy vision and prevent progression of *Timira*.

### Rasayana Therapy

*Rasayana Yogas* such as *Triphalaghrita*, *Chyavanaprasha*, *Amalaki Rasayana*, *Haritakyadi Rasayana*, *Lohadi Rasayana*, and *Saptamrita Loha* are used.

### Dietary and Lifestyle Recommendations

Includes intake of *Ghrita*, *Mudga*, *Triphala*, *Amalaki*, *Shatavari*, *Yava*, *Patola*, *Payasa* with *Ksheera* and *Ghrita*, vegetables like *Patola*, *Karkotaka*, *Vartaka*, *Tarkari*, *Karira*, and *Shigru*. According to *Chakradatta*: Sprinkling cold water over the eyes while holding water in the mouth is said to provide immediate relief from *Timira*. Additionally, placing moistened palms over the eyes after rubbing them post-meal is believed to be effective in alleviating symptoms.[5]

## 6. Glaucoma

Another leading cause of blindness globally, accounting for approximately 15% of all cases, with around 600,000 people affected annually. It is a chronic, progressive optic neuropathy characterized by damage to the optic nerve, primarily due to raised intraocular pressure (IOP) caused by excessive aqueous secretion or obstruction to aqueous outflow. Primary open-angle glaucoma, the most common type, affects individuals over 40 and is often asymptomatic until significant visual field loss occurs, highlighting the need for regular eye examinations. Early detection and treatment, including lowering IOP through medications and surgical interventions, are crucial to prevent blindness, as vision loss from glaucoma is irreversible. Patients should avoid activities that strain the eyes, such as observing minute objects for prolonged periods or working in dim light. Clinical features of *Adhimantha* in *Ayurveda* correlate with glaucoma.

### General line of treatment of Adhimantha

**Table 2: Management of Adhimantha based on Avastha.**

Purva Rupa Avastha	Samavastha Chikithsa	Nirama Avastha Chikithsa
Tikshna Shirovirechana.	Langhana - for 4 days.	As soon as Niramavastha
Tikshna Gandusha.	Seka.	is acquired after treating
Dhumapana.	Bashpasweda.	the Purvarupavastha and
Upavasa.	Intake of Madhura	Samavastha, general and
Lepa.	Ahara and Tiktaahara.	local Dosha Shodhana and
Avaguntana.	Lepa or Alepa.	Shamana is performed.
Sechana.	Dhumapana.	
		Snehana.
<b>Note</b> - Tikshna		Svedana.
Shirovirechana,		Siravyadha at forehead or
Gandusha, Dhumapana,		Apanga.
Upavasa is		Shiro Basti.
contraindicated in		Nasya.
Vatajaadhimantha		Dhumapana.

*Adhimantha*, categorized under *Sarvagata Netrarogas* (disorders involving the entire eye), is a serious condition that can lead to rapid vision loss if proper therapeutic and lifestyle guidelines are not followed. The rate of vision impairment varies based on the *Doshic* type: in *Kaphaja Adhimantha*, vision may be lost within seven nights; in *Raktaja*, within five nights; in *Vataja*, within six nights; and in *Pittaja Adhimantha*, complete vision loss can occur within a single day.

This highlights the critical need for timely and appropriate *Ayurvedic* intervention to prevent swift ocular deterioration.

**7. Ocular trauma** is a leading cause of severe ocular morbidity, with over 2 million cases reported annually, including over 40,000 resulting in significant vision loss. In India, over 500 lakh people suffer from blindness, with the blind population increasing by 38 lakhs each year; 1.2% of these cases are due to avoidable ocular injuries.

Types of ocular injuries include blunt trauma, penetrating injuries, perforating injuries, ocular foreign bodies, and non-mechanical injuries.

Prophylactic measures include advising industrial and agricultural workers to use special guards or protective glasses, using Crooker's glass to protect welding workers and cinema operators from infrared and UV rays, and immediate irrigation with clean water in case of chemical injuries.

In *Ayurveda*, ocular injuries are described under the heading *Nayanabhighata*. *Nayanabhighata* refers to ocular trauma resulting from both physical and psychological factors.

Ayurvedic texts describe several causative factors, including the use of potent collyrium, exposure to environmental elements such as strong wind, sunlight, fumes, and dust, insect bites, water-related activities, nocturnal wakefulness, and emotional disturbances like fear and grief.[6,7]

The treatment protocol is based on the severity of the condition. For mild injuries, gentle fomentation using *Aasya Bhashpa* is recommended. In more severe cases, therapeutic measures include *Parisheka* (eye irrigation), *Lepa* (herbal pastes), *Aschyotana* (instillation of medicated drops), *Tarpana*, and *Nasya* using drugs that are *Snigdha* (unctuous), *Sheeta* (cooling), and of *Madhura Rasa* (sweet taste), all of which pacify aggravated *Doshas*.

In cases of *Atipravishta Netra* (displacement or protrusion of the eyeball), techniques to reposition the eye within the orbital cavity (*Akshi kosha*) are advised.

These include respiratory maneuvers, induction of vomiting, sneezing, and even controlled manual techniques under expert supervision. *Kriya Kalpa* therapies such as *Seka* (stream pouring),

*Bidalaka* (application of pastes over closed eyelids) using drugs like *Triphala*, *Yashtimadhu*, and *Lodhra*, and *Pindi/Kavalika* (poultices) with *Shigru*, *Bhringaraja*, and *Lodhra* are also employed.[8,9,10]

### Ayurvedic preventive measures in *Swastha*

*Pragnaparadha* - (knowingly committing mistakes) indulging in harmful activities which are not conducive to ocular health - *Satvavajaya chikitsa*

*Parinama* - timely changes occurring in ocular tissues - *Kriyakalpa* and *Rasayana* therapies

*Asathmya Indriyarthasamyoga* - *Atiyoga*, *Ayoga* and *Mithyayoga* of *Chakshur Indriya*.

A wise person should strive for abstaining from the above 3

### Dinacharya

- *Netra Prakshalana* or with *Toyapurnamukha*
- Regular application of *Souviranjana* and application of *Rasanjana* once in 7 days as eyes always have a threat from *Shleshma*
- *Dhoomapana* - *Kaphahara*
- *Pratimarsha Nasya* - *Drushti Prasadana*
- *Abhyanga*, *Padabhyanga*, *Padatra Dharana*, *Chatra Dharana* - *Chakshushya*
- *Snana* - *Sarvendriya Prabodhana* and *Chakshushya*

### Rutucharya

During *Adana Kala* - limit out door time, wearing good quality sun glasses, maintaining hydration, try to keep the eyes moist by using *Snigdha*, *Madhura Dravyas*

During *Visarga Kala* - Avoid exposure to dust storms, wearing protective glasses from air born allergies.

### Vegadharana

*Adhovata*, *Pureesha*, *Mutra*, *Kshuda*, *Kshavathu*, *Nidra*, *Bhashpa*, *Chardi* and *Jrumbha*, *Vegadharana* should be avoided by an individual aspirant of good healthy vision.

### Chakshushya Ahara

*Acharya Charaka* has explained *Aahara Varga* in *Suthrasthana* 27th chapter & *Bhavamishra* also explained in *Bhavaprakasha* is given in Table 3.

**Table 3: Chakshushya Ahara**

Haritakyadi Varga	Guduchyadi Varga	Dhanya Varga
Amalaki	Jivanti	Shukadhanya-
Vibhitaki	Shobanjana	Yava
Haritaki	Nirgundi	Raktashali
Yashtimadhu	Shatavari	Shimbi Dhanya
Lodhra	Kumari	Mudga
Saindava Lavana	Punarnava	
	Bhringaraja	
Shaka Varga	Dhatu Varga	Phala Varga
Mulaka	Vanga	Kadali
A/C Yoga Rathnakara	Yashada	Dadima
Jeevanthi	Loha	Draksha
Vasthuka	Suvarna Makshika	
Matsyakshi	Kapardika	
Meghanada	Shanka	
Punarnava	Rathna	
Dugdha Varga	Ghrita	Kritanna Varga
Go Dugdha	Go Ghrita	Mamsa Rasa
Hasthi Dugdha	Aja Ghrita	
Stree Stanya	Avika Ghrita	
	Ksheerotha Ghrita	
	Koumba Ghrita	
	Manushi Ghrita	

Regularly one should practice *Kriyakalpa* procedures - particularly *Tarpana*, *Putapaka*, *Aschyotana* and *Anjana*. Studies have shown that regular practice of eye exercises, *Yogasana*, such as *Surya Namaskara*, *Shavasana*, *Nadi Shodana*, *Pranayama* and *Trataka* play a major role in promoting eye health.

### Manasika Chikitsa

*Chakshushyopanishad* quotes *Mantra* to chant regularly for protection of eye sight & cure eye diseases.

*Acharya Vagbhata* emphasizes *Manaso Nivṛutti* - withdrawing the mind from unpleasant visual stimuli - and avoiding emotional extremes like *Krodha* (anger) and *Shoka* (grief), which is a key component of *Manasika Chikitsa*.

## Discussion

The topic of avoidable blindness emphasizes mainly the prevention of ocular disease, the reduction of visual impairment, and the promotion of ocular health. Major population-based surveys estimate the magnitude and causes of blindness, reporting that blindness in India is significant not only due to its vast prevalence but also because,

Its causes are preventable and curable with the current available knowledge and skills. Eye-promoting regimens delay degenerative processes in the retina and focal points while nourishing visual structures. Hence, *Ayurvedic* measures are found to be effective in eye care. In the modern lifestyle, reduced activity, sedentary habits, and increasing weight gain contribute to the development of metabolic syndrome, indirectly affecting the vital organs of the eye. Studies report that people with an active lifestyle are 70% less likely to develop neovascular AMD compared to those without an active lifestyle. One must follow *Dinacharya*, *Rutucharya*, *Kriyakalpa*, and other measures correctly and strive for *Samyakyoga* of actions. When these regimens are performed at a very early stage of possible *Dosha Dhatu* and *Agni* vitiation, vision can be reverted to normalcy.

## Conclusion

Blindness is poised to become a significant challenge in the future. *Ayurveda* places a strong emphasis on prevention rather than cure. Delaying treatment for visual impairment often leads to complications and irreversible vision loss. The fundamental principles of Ayurveda play a crucial role in promoting and restoring vision. *Kriyakalpa* procedures prevent the aging effects in the eyes, rejuvenate them, and improve their functionality. Ensuring good quality vision allows individuals with visual impairments to lead fulfilling lives and achieve their goals. The verse from Charaka Samhita underscores the importance of eyesight by stating that even if a person is endowed with sensory faculties, strength, and beauty, without eyesight, they are as incapacitated as an insect.[11]

## References

1. Navre KRS. Ashtanga Hridayam of Vagbhata, with Arunadatta's Sarvangasundara and Hemadri's Ayurvedarasayana. Sutrasthana 16/29. Varanasi: Krishnadas Academy; 2000. Reprint edition [Crossref][PubMed][Google Scholar]
2. Navre KRS. Ashtanga Hridayam of Vagbhata, with Arunadatta's Sarvangasundara and Hemadri's Ayurvedarasayana. Uttarasthana 13/47. Varanasi: Krishnadas Academy; 2000. Reprint edition [Crossref][PubMed][Google Scholar]

3. Navre KRS. Ashtanga Hridayam of Vagbhata, with Arunadatta's Sarvangasundara and Hemadri's Ayurvedarasayana. Sutrasthana 8/44. Varanasi: Krishnadas Academy; 2000. *Reprint edition* [[Crossref](#)][[PubMed](#)][[Google Scholar](#)]
  4. Suresh Babu MS. Chakradatta (English translation). Chapter 59, Verse 104. Varanasi: Chaukhamba Krishnadas Academy; 2012. *p. 602, 573* [[Crossref](#)][[PubMed](#)][[Google Scholar](#)]
  5. Suresh Babu MS. Chakradatta (English translation). Chapter 59, Verses 97–98. Varanasi: Chaukhamba Krishnadas Academy; 2012. *p. 602, 573* [[Crossref](#)][[PubMed](#)][[Google Scholar](#)]
  6. Acharya NR. Sushruta Samhita with Sri Dalhanacharya Teeka. Uttartantra 18/3. Varanasi: Chaukhamba Orientalia; 2009. *Reprint edition. p. 824, 641* [[Crossref](#)][[PubMed](#)][[Google Scholar](#)]
  7. Sharma S, editor. Ashtanga Sangraha of Vriddhavagbhata with Shashilekha Sanskrit commentary by Indu. Sutrasthana 33/28. Varanasi: Chaukhamba Sanskrit Series Office; pp. 964, 712 [[Crossref](#)][[PubMed](#)][[Google Scholar](#)]
  8. Acharya VJT. Sushruta Samhita of Sushruta with Nibandhasangraha commentary of Sri Dalhanacharya. Uttaratantra 19/3,5,7. Varanasi: Chaukhamba Orientalia; 2009. *Reprint edition. p. 724, 640–641* [[Crossref](#)][[PubMed](#)][[Google Scholar](#)]
  9. Prabhakara Rao G. Chakradatta (English translation). Chapter 59, Verses 155–156. Varanasi: Chaukhamba Orientalia; 2014. *p. 825, 567–568* [[Crossref](#)][[PubMed](#)][[Google Scholar](#)]
  10. Sen GD. Bhaishajyaratnavali, edited with Siddhiprada Hindi Commentary. Chapter 64. Varanasi: Chaukhamba Surbharati Prakashan; pp. 1196, 987–988 [[Crossref](#)][[PubMed](#)][[Google Scholar](#)]
  11. Acharya VJT. Charaka Samhita of Agnivesha with Chakrapani Datta's Ayurveda Deepika. Sutrasthana 8/9. Varanasi: Chaukambha Sanskrit Sansthan; 2001. *Fifth edition* [[Crossref](#)][[PubMed](#)][[Google Scholar](#)]
- Disclaimer / Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of Journals and/or the editor(s). Journals and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.