International Journal of Pharmaceutical research and Applications
Volume 11, Issue 4, Jul.-Aug.2026, pp:1042-1047 www.ijprajournal.com ISSN:2456-4494

Prathama Patalgata Timira and Simple myopia: A comparative Review of Ayurvedic and modern concepts

Dr. Dhananjay Madakwar[1], Dr. Govind Tundalwar[2], Dr. Priya Bhardwaj[3]
[1.]*PG Scholar, Department of Shalakyatantra, Shree Ayurveda Mahavidyalaya,Nagpur, Maharashtra, India.*
[2.]*Professoe & HOD of Department of Shalakyatantra, Shree Ayurveda Mahavidyalaya, Nagpur, Maharashtra, India*
[3.]*Assistant Professor of Department of Shalakyatantra,Vaidya YagyaDutta Sharma Ayurveda Mahavidyalaya, Bulandshahr, Uttar Pradesh, India.*

Date of Submission: 25-07-2026 Date of Acceptance: 06-08-2026

ABSTRACT
Prathama patalgata Timira is an eye condition that describes under the *Netra Roga* in *Ayurveda*. It is characterized by visual impairment when the first *Patala*of the eye is affected. Clinically its symptoms are similar to simple Myopia. Myopia is common refractive error in modern ophthalmology in which near vision remains clear, but distant objects appear blurred. Myopia is becoming a major public health problem because more people are developing it worldwide. While modern science attributes myopia to elongation of the eyeball or high refractive power of the cornea and lens. *Ayurveda*explain *Timira* through the vitiation of *Doshas a*ffecting the visual apparatus. The purpose of this review is to correlate *Pratham Patalgata Timir* with myopia and provide an overview of its pathophysiology, etiology, clinical characteristic, diagnosis, and treatment from both Ayurvedic and modern view.

KEYWARDS: *Timira,Prathama patalgata Timira*, Myopia, Refractive errors, *Drishti, Netra Roga*, Visual Impairment, Optical Correction.

I. INTRODUCTION
Shalakyatantra is the branch of *Ayurveda*,in which the eye diseases are more important than other systemic diseases.In*Ayurveda* the eyes are described as the most delicate organ. The classical *Ayurvedic* texts describe *Timira* under *Drishti Gata Roga*, where the pathology primarily affects the visual axis.

In many East and South East Asian regions, up to 80–90 per cent of teenagers is myopic and Indian studies report school myopia prevalence between roughly 7.5 to 20 percent. Uncorrected myopia in childhood and youth causes educational and social disadvantage, while progression to high myopia increases the risk of retinal detachment, myopic maculopathy and glaucoma. According to the World Health Organization, uncorrected refractive errors are the leading cause of visual disability worldwide, affecting both developed and developing nations. Increasing screen time, near work activities, and lifestyle changes are contributing to a rising global burden.

Myopia can be considered as *Pratham Patalgata Timira* on the basis of its clinical features. If aggravated *Doshas* are situated in the first*Patala,* clinical features are "*Avaykatdarshana*"- Means distant vision difficulty. *Kacha* and *Linganashah* are the progressive stages of *Timira*. Management of the *Timira* is local and systemic both as described in *Samhitas.Chikitsa* such as *Snehan* (Oleation), *Raktamokshana* (bloodletting), *Virechana* (purgation), *Nasya (*nasal therapy), *Murdhabasti,Anjana* (collyrium), *Lepa*, *Tarpana,* are indicated to be given according to *Doshik* involvement of *Timira.*

II. AIMS AND OBJECTIVES
- To review *Pratham patalgata Timira*and correlate it with simple myopia using *Ayurvedic* and modern scientific literature.
- To study the *Ayurvedic* concept of *Pratham patalgata Timira.*
- To review the modern concept of myopia

III. MATERIALS AND METHODS
This review is based on classical Ayurvedic texts including *Sushrut Samhita, AshtangaHridaya, and Madhava Nidana*,along with modern ophthalmology.

AYURVEDIC CONCEPT OF *TIMIRA*
Nidana (Etiological factor)
Excessive reading and close work. Suppression of natural urges, night awakening and excessive

International Journal of Pharmaceutical research and Applications
Volume 11, Issue 4, Jul.-Aug.2026, pp:1042-1047 www.ijprajournal.com ISSN:2456-4494

exposure to sun light, Improper diet, *Vata-Pitta* aggravating foods and mental stress.

Samprapti

Due to *HetuSevana Vata, pitta* and *kapha*becomes aggravated and localized in the ocular tissue, especially the first *Patala.*Vitiated *doshas* obstruct the normal function of *Alochaka Pitta* leading to progressive diminition of vision.

Clinical features

- Blurred vision or cloudy vision
- Inability to perceive distant object clearly
- Eye stain, headache and photophobia
- Progressive worsening with age and lifestyle error

Diagnosis of *Timira*

Diagnosis of the any disease mainly depend upon the sign and symptoms. In *Timira* the signs and symptoms have been mentioned in two ways

1) According to predominant of *Dosha*

2) According to *Patala* involvement

1)According to Vitiation of *Dosha*: The symptoms according to predominant *Doshas* are as fallows.

A)*Vataja Timira*:The patients suffering from *Vataja Timira* see objects as if they are moving/ unsteady, hazy like covered with thin cloth, dirty, reddish in colour and appear tortuous in shape *(Vyaviddha Darshana*). Sometimes blurred and some other times as clear and clean,see hairs, mosquitoes and rays of light in front of his eyes.

B)*Pittaja Timira*:In*PittajaTimira*, the patient sees flashes of sun, glow worm, rainbow and the lightening. He views bluish and blackish colour as variegated as the feathers of peacock.

C) *Kaphaja Timira*: In *Kaphaja Timira*, the person views all the objects glossy and white like the colours of white clouds. The patient visualizes moving clouds in the cloudless sky. All still objects appear as if inundated in water.

D) *Rakataja Timira*: A patient of *Rakataja Timira* views all objects to be variegated colours such as dark greenish, greyish or blackish and smoky all around. In *Timira* caused by blood, the organ of vision is red and the person sees objects as blurry.

E) *Sansargaja Timira*: *Sansargaja Timira* is a condition where two *Doshas* becomes vitiated together and affects the ocular tissue,leading to impairment of vison. Above mention symptoms are seen in patients in mixed forms.Sometime patients see object clearly and sometime vision becomes blurred. Sometimes objects appear black and sometimes white.

F) *Sannipataja Timira*: This condition is due to vitiation of all *Dosha* together, the person views all objects as of variegated colours, scattered (spread out images) and as having double or manifold images all around.

2) According to *Patala* involvement

Patala	**Main Symptoms**	**Severity**
Prathama	Blurred vision (*Avyakta Darshan*) difficulty seeing distant object	Mild
Dvitiiya	Distorted vision, double vision, floaters, difficulty with fine details	Moderate
Tritya	Marked visual loss, poor recognition of object and colors	severe
Chaturtha	Severe visual impairment, only light perception, progression to *kacha / Linganashah*	Very severe

AYURVEDIC MANAGEMENT OF PRATHAMPATALGAT TIMIRA

The main aim of *Ayurvedic* treatment is to maintain visual function, nourish ocular tissue, and prevent the progression of *Timira*. Applying thefollowing ways of *Ayurvedic* management in *Timira.*

- *Nidan parivarjana*
- *Dosha Shamana* and *Shodhana*
- *Netra kriyaKalp*
- *Rasayana*Therapy
- *Pathya-Apathya*

Nidan Parivarjana Management of *Timira* and myopia should begin with *Nidana Parivarjana*and *Netra sanrakshana*. *Nidan Parivarjana* means avoiding the causes that's creates diseases i.e. excessive screen exposure, reading in dim light, night awakening, smoking and alcohol, spicy, oily, and junk food.

Shaman* and *Shodhan*in*Ayurveda shaman means reducing the aggravated *Doshas*and brings them under normal position without removing from body.*Nasya, Tarpan, Anjan* can be used for *shaman* with using *Chakshushya drugs*.

Elimination of vitiated*Doshas* from the body is called as *Shodhana*. Eye is the predominant for

International Journal of Pharmaceutical research and Applications
Volume 11, Issue 4, Jul.-Aug.2026, pp:1042-1047 www.ijprajournal.com ISSN:2456-4494

*Pitta*so*Anulomana* can be used for vitiated *Pitta. Triphala Ghrita*can be used for *Shodhana.*

Netra kriakalpya

- ***Tarpana***: Retention of medicated ghee over the open eyes within a dough ring for specified time, using *yogas s*uch as *Mahatriphala Ghrita, Jeevantyadi Ghrita, Phalatrikadi Ghrita, Baladi Ghrita and Triphala Ghrita.*
- ***Nasya***: Administration of medicated ghrita or oils such as *Anu Taila* or *PanchendriyaVardhan Tail* through the nasal route, based on the close relationship of nose and eyes through *Shringataka marma* and intracranial channels.
- ***Aschyotana and Anjana***: Use of drops and collyria such as *Madhu Aschyotana*, *Guduchyadi Anjana*, *Pathyadi Varti, Chandrodaya varti* are based preparations for local cleansing and stimulation.
- **Non pharmacological methods:** *Trataka Yoga Kriya*, eye exercises and some *pranayama* techniques, which seek to relax eye muscles, enhance focusing and minimize asthenopic symptoms. Reviews of *Tarpana* discuss indications that include visual disturbances, dryness, strain and early *Timira* and identifies likely mechanisms as include prolonged contact time, corneal lubrication, drug penetration because of the lipophilic nature of ghrita

***Rasayana* Therapy**: *Rasayana i*s an *ayurvedic* therapy that nourished body tissue (Dhatus) and improve immunity. In *Ayurveda* the *Rasayana* drugs like *Triphala Ghrita, MahatriphaladiGhrita, Amalaki, Yastimadhu, Guduchi, Shatavari* is used to nourish ocular tissue, improve visual acuity, delay progression of *Timira*, reduce eye strain. These drugs are used orally or in the form of *kriyaKalp.*

Pathya-Apathya*:*According to *ayurveda* the *Pathya* refers to *Ahara-Vihara* i.e. lifestyle and diet which are beneficial to maintain good physical and mental health of human beings. Beneficial for maintaining eye heaths is *Anjana, Nasya, Swedana, Virechana*. Recommended foods are old rice and wheat, Barley, Green gram, cow ghee, Leafy vegetables. Light easily digestive food. *Pathya*maintains the balance condition of *doshas* in eyes.

Apathya means the foods, habits and lifestyle which are the harmful for body and mind. *Apathy*a disturb the balance condition of *Doshas* and aggravate diseases. So, for good health of eyes avoid Angar, excessive reading and night awakening, excessive crying, very spicy, sour, salty, oily food.

MYOPIA ACCORDING TO MODERN SCIENCE

Definition: Myopia is a refractive error where parallel rays of light coming from infinity are focused in front of the retina accommodation is at rest, causing blurred distance vision but clear near vision.

Etiology:

- Increased axial length i.e. increasing anteroposterior length
- Increased curvature of the cornea, lens or both
- Anterior placement of crystalline lens (positional change of lens)
- Increasing in the refractive index of crystalline lens

Gradation of Myopia:

- American Optometric Association has defined three grades of myopia
- Low myopia, when the error is ≤ -3D
- Moderate myopia, when the error is between -3D to -6DHigh myopia. when the error is ≥ -6D

CLASSIFICATION OF MYOPIA

- Congenital myopia
- Simple myopia or developmental myopia
- Pathological myopia or degenerative myopia
- Secondary myopia

CONGENITAL MYOPIA

Present since birth and usually diagnosed by the age of 2-3 years. Fundus examination shows myopic crescent. Anisometropia is usually present, hence most of the time the error is unilateral. Rarely it may be bilateral. Early correction of congenital myopia is desirable to prevent amblyopia.

SIMPLE MYOPIA

It is the most common type of myopia. Prevalence rate of simple myopia is 20-40 % of population and most commonly seen in school going age i.e. Age between 5 to 15 years. Simple myopia can be considered as a physiological error not associated with any diseases.

Etiology:

- Mechanical development: - It results from normal biological variation of the development of eye.

International Journal of Pharmaceutical research and Applications
Volume 11, Issue 4, Jul.-Aug.2026, pp:1042-1047 www.ijprajournal.com ISSN:2456-4494

- Axial type of simple myopia: - It is physiological variation in the length of eye.
- Curvature type of simple myopia is considered to be due to underdevelopment of the eyeball.
- Near excessive work like watching Television, smart phone, computer work. And reading.
- Not using proper glasses contributes towards progression of myopia.

Symptoms:

- Poor vision for distance is the main symptoms of myopia.
- Asthenopic symptoms i.e. eye stain, headache.
- Half shutting of the eyeball.

Signs:

- Prominent eyeballs. The prominent eyeball is large and prominent
- Anterior chamber is slightly deeper than normal.
- Pupils are large and bit sluggishly reacting.
- Exophoria may occur in some patient due to imbalance between accommodative efforts and convergence.

PATHOLOGICAL MYOPIA

It is characterised by elongation of the eyeball, usually resulting in a refractive error greater than -6.0 D OR an axial length exceeding 26 mm. It is associated with progressive degenerative changes in the sclera, choroid, retina, and vitreous, which may lead to permanent visual impairment.

Etiology:

- Hereditary.
- Excessive axial elongation of the globe.
- More common in women than male.

Symptoms:

- Defective vision. There is considerable failure in visualfunction as the error is usually high.
- Floaters are often complained by many patients. These occurs due to degenerated liquefied vitreous.
- Difficulty in night vision.
- Photophobia.

Signs:

- Prominent eyeball
- Cornea is larger
- Anterior chamber is deep
- Magnitude of refractive error rapidly increases from -10 D to -40 D.
- Optic disc appears large and pale
- Degenerative changes to retina and choroid.
- Degenerative changes in vitreous.

SECONDARY MYOPIA

Secondary myopia is caused by other eye diseases which are not recognised as population risk factor for myopia. Secondary myopia has following types.

- Index myopia
- Curvature secondary myopia
- Positional secondary myopia.
- Consecutive myopia
- Pseudo myopia
- Myopia of prematurity
- Drug induced myopia

1) **Index myopia:** Index myopia is a type of secondary myopia that occurs due to anincrease in the refractiveindex of the crystalline lens. Although the shape and position of the lens remain normal, changes within the lens substance increase its optical power.

Etiology: The refractive index of the lens may increase in several conditions,including

- Early nuclear cataract (nuclear sclerosis) – the most common cause of index myopia.
- Diabetes mellitus – fluctuations in blood glucose levels can alter the lens refractive index.
- Metabolic changes affecting the crystalline lens

Symptoms:

- Gradual onset of blurred distance vision.
- Near vision remains good or may temporarily improve particularly in early nuclear cataract.
- Progressive increase in myopic refractive error.
- Symptoms of cataract, such as glare and reduced contrast sensitivity, may develop later.

2) **Curvature secondary myopia:** It may be corneal or lenticular.

- Corneal curvature secondary myopia may occur in keratoconus.
- Lenticular curvature secondary myopia may occur in lenticular anterior or posterior.

International Journal of Pharmaceutical research and Applications
Volume 11, Issue 4, Jul.-Aug.2026, pp:1042-1047 www.ijprajournal.com ISSN:2456-4494

3) **Positional secondary myopia:** It is a temporary type of secondary myopia in which the position of the crystalline lens will be change. This will be happened due to anterior displacement of the crystalline lens by trauma to the eye, swelling of the ciliary body or certain drugs e.g. Sulphonamides. In this myopia sudden onset of blurred vision occurs relatively near vision remains clear.

4) **Consecutive myopia:** It may be occurred in following condition.
   - Surgical overcorrection of hypermetropia
   - Pseudophakia with overcorrected IOL power.

5) **Pseudophakia:** It is secondary myopia occurs in an eye after cataract surgery with intraocular lens implantation. It may be happened due to implantation of an IOL with excessive power, anterior displacement of IOL.

6) **Myopia of prematurity:**This secondary myopia develops in prematurely born infants due to abnormal development of eye.

7) **Drug induced myopia**: - May occur with cholinergic drugs, sulphonamides and steroid. It usually affects both the eyes at the same time. Drug induced myopia is a secondary myopia caused by certain medication and sudden temporary blurredin distant vision. Symptoms go away after stopping the medications.

TREATMENT OF MYOPIA

Optical correction: - Thisis the first line treatment for myopia. In this treatment concave lenses and contact lenses are used to formed image on the retina.

Refractive Surgery: - Surgeries are performed in a patient above 20 years.Patients'corneal pathology. Surgeries are as fallows

1) LASIK (Laser assisted in-situ keratomileusis
2) PRK (Photorefractive keratectomy)
3) RK (Radial keratotomy)
4) SMILE (Refractive lenticule extraction)
5) Orthokeratology
6) Phakic intraocular lens implantation.

Lifestyle modification: -

Increase outer activities. Reduce prolonged near work and excessive screen time. Followthe 20-20-20 rule (every 20 minute, look at an object 20 feet away for 20 second). Maintain proper reading distance and adequate lighting.

IV. DISCUSSION

Both *Ayurvedic* and modern ophthalmic sciences emphasize the importance of identifying visual disturbances at an early stage to prevent disease progression and preserve vision. In contemporary ophthalmology, myopia is explained by structural and refractive alterations of the eye, such as axial elongation or increased refractive power, resulting in the formation of images in front of the retina. In contrast, *Ayurveda* describes *Prathama Patalgata Timira* as a disorder caused by the vitiation of *Doshas*, primarily *Vata* and *Pitta*, affecting the first *Patala* of the eye and leading to impaired vision. Although the underlying concepts differ, integrating evidence-based ophthalmic management with appropriate *Ayurvedic* preventive measures, lifestyle modifications, and therapeutic interventions may provide a more comprehensive approach to patient care.

V. CONCLUSION

Prathama patalgata Timira is considered the closest *Ayurvedic* counterpart of simple myopia because both conditions share the prominent feature of diminished distant vision. While modern ophthalmology attributes myopia to refractive and anatomical alterations of the eye, *Ayurveda* explains *Timira* through the vitiation of *Doshas* affecting the ocular *Patalas*. Despite these differences in pathophysiological concepts, a comparative understanding of both systems offers valuable opportunities for integrative research and clinical practice. Timely detection, adoption of healthy visual habits, appropriate refractive correction, and evidence-informed *Ayurvedic*management may contribute to better visual outcomes and improved quality of life.

REFERENCES

International Journal of Pharmaceutical research and Applications
Volume 11, Issue 4, Jul.-Aug.2026, pp:1042-1047 www.ijprajournal.com ISSN:2456-4494

[1]. *Sarthvagbhatta, uttarsthan Adhya* 12, *vd.* Ganesh krushana Garde edition 2003 page no 386.
[2]. *Sharangdhar Samhita, Rog-Ganana Adhya* 7, *Surbharti Prakashan* 2001 by *vd.* Brahamanand Tripathi, page no 116.
[3]. *Sushruta*. *Sushruta Samhita, Uttara Tantra*. Edited by Sharma PV. Varanashi: *Chaukhamba Visvabharati*,2008
[4]. *Netra Rog Vigyana* in *Ayurved*a, *Chaukhamba* Orientalia;2004 by Murthy KRS.
[5]. WHO. World report on vision. Genev:World health organization, 2019.
[6]. *Charaka. Charak Samhita*, Edited by Sharma PK, Dash B. Varanasi: *Chowkhamba Sanskrit* Series; 2012
[7]. *Sushruta. Sushruta Samhita Ayurveda tattva sandipika.*Ambikadatta Shastri *Chaukhambaorientalia* Varanasi reprinted edition 2010, *Uttarsthan* 7/7-10, page no 41.
[8]. American Optometric Association (1997), Optometric Clinical practise Guideline Care of the patient with Myopia.
[9]. Jat DK, Puskar S, Dhart SK, Pamnani GC, Vardhana Comparative analysis of Timira and Myopia: Insights from *Ayurvedic a*nd modern perspective. J Ayurveda Integer med.sci. 2024, JAIMS 9.5,2025
[10]. *Vagbhatta.Astang Hridaya.* Edited by Murthy KRS, Varanasi. Chaukhamba Krishanadas Acadamy; 2014
[11]. Myopia, Wikipedia Jump up Near-sightedness. National institutes of Health.