



Triphala in Eye Diseases: A Critical Review

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Abstract

Preventive and curative principles of ayurvedic system of medicine stands on the maintenance of *Jatharagni* (Internal digestive fire) and *Kostha* (excretory system). *Jatharagni*, which helps in the proper digestion and assimilation of ingested food as well as it helps in proper functioning of other types of *Pitta*-metabolic factors specially *Alochaka pitta* (rods and cones functional entity) in eyes, whereas *kostha* helps in the proper excretion of waste products. Proper functioning of these two systems help in maintaining the health, longevity and disease free life. Ancient Ayurvedic scholars explained lot many combination of drugs which act on both the above said system. Among them one of the most popular formulation is *Triphala* which contain powder of three fruits in equal proportion viz. *Haritaki* (*Terminalia chebula* Retz.), *Vibhitaki* (*Terminalia balerica* Roxb.) and *Amalaki* (*Embllica officinalis* Gaertn.) a very powerful *Chakshushya rasayana* (visual function enhancer/rejuvenator) [1]. A popular folk saying is “No mother? do not worry so long as one have *Triphala*” the reason is that *Triphala* is one such formula which care the body as a mother cares for her children. Upon analyzing this formula, it has control over all three body humours i.e. *Haritaki*- on *Vata*, *Amalaki*- on *Pitta* and *Vibhitaki*- on *Kapha*.

No doubt various studies show *Triphala* is a wonderful clinically proven drug in maintaining the health as well as treating many ailments. As need of the hour, the increased prevalence of ocular disorders posing challenges to the medical science motivated the author to highlight and critically discuss the role of *Triphala* in ocular health as well as treating ocular disorders.

Keywords: *Jathara agni*; *Kostha*; *Triphala*; *Chakshushy*; *Rasayana*; Ocular health

Introduction

Homeostasis as per ayurvedic fundamentals is harmony and balance between *tridoshas* (three body humours i.e. *vata*, *pitta* and *kapha*), *dhatu*s (*Rasa* etc. seven body building blocks) and *mala* (excrements), *Agni* (digestive and metabolic process) along with the pleasant state of soul/mind and senses [2]. Among the sense organs, eye is consider to be the most important [3] as well as delicate organ which gets easily afflicted by the imbalance of basic body humours (*doshas*) and results in its decreased/disturbed function ie; *drishti kriya* (vision). All the materia medica and treatment procedures which create *doshic* balance (somatic and psychological) are equally implies to the treatment of eye along with a group of materia medica coined as ‘*Chakshushya rasayana*’ had been highlighted by our ancient scholars. *Chakshushya* class of medicines has a targeted action on the eye and visual apparatus. Although we have very little research data in this support but the practical experience and very long traditional usage of these medicines in the eye ailments is more than laboratory evidence.

Triphala is one such combination which can correct the imbalance of doshas as well as bring them to normalacy along with specific vision promoting effect. The ingredients that make up *triphala* are very potent individually; when combined correctly; synergy enhances the efficacy and healing quotient exponentially. So in this article an attempt has been made to critically study the role of *triphala* in ocular health as well as treating ocular disorders in the light of literature available in the ancient classics including nighantus and recent researches over it from internet.

Triphala: Haritaki, Vibhitaki, Amalaki

Haritaki- It’s botanical source is *Terminalia chebula* and called as *Chebulic Myrobalans* in Latin. *Charaka* goes so far as to say that *Haritaki* is as nourishing and useful for everyone as mother’s milk. He mentions that it’s a *rasayana* for the eyes, hence it can be used to prevent the eye diseases. It helps in improvising the *agni*, and thus

enhances the absorption of nutrients from the digestive system which is supported by various studies [4-6]. Another excellent quality of this fruit is that it cleanses the macro and micro circulatory channels, known as “*shrotovishodhini*,” which means that it can clear the channels, both big and small [7]. In addition it is called as *sarvah dosha prasamani* (pacifies all-doshas), very few fruits and herbs have this designation. It also supports the body’s immune system [8]. On top of everything, *Haritaki* has an anti-aging value “*vayasthapani*” (anti-aging) [9,10]. Thus advised in the prevention of age related eye disorders like Age related macular degeneration (ARMD), Senile Cataract, Open angle glaucoma and Retinal degeneration.

Vibhitaki - The botanical source is *Terminalia bellerica*. It is said to be best homeostatic, meaning that it helps to regulate the internal environment specially the circulation of pure blood in the body. It is an ideal herb for pacifying both *Pitta* and *Kapha*. *Acharaya charaka* quotes *vibhitaki* as *netre hitam*, meaning it is beneficial for the eyes and it cleanses the *Rasa* (plasma), *Rakta* (blood), *Mamsa* (muscular tissue) and *Medo dhatu*s (adipose tissue) when they act as *dushyas* (vitiating tissues) [11] in the pathophysiology of a disease formation.

Amalaki - The botanical source is *Embllica officinalis*. It helps in purifying toxins from the body, by enhancing food absorption. When our digestion becomes stronger, the food we eat is converted to nutrition rather than staying undigested and producing impurities (*Aama*). Thus flushes out the toxins out of the body. The eyes are another organ that specially benefit from *Amalaki*. In fact, *Amalaki*

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is called *chakshusya*, which means “a rasayana for strengthening the eyes [12]. This is because *Amalaki* enhances both *Ranjaka Pitta* (one type of *Pitta* that governs liver function and the blood formation) and *Alochaka Pitta* (another type of *pitta* that governs the eyes/ vision phenomenon). Because of its high content of Vitamin C, *Amalaki* is a powerful antioxidant. Scientific research shows that *Amalaki* is an extremely potent antioxidant, excellent in removing excess free radicals, which are at the basis of much degenerative disease and aging. All these qualities make *Amalaki* a powerful immunity-enhancer [13].

Triphala: Cakshushya Rasayana

“*Cakshu tejomayam tasya visheshat sleshmato bhayam*”

By nature *Kapha dosha* has a tendency to create *Abhishyandhi sampрати* (i.e microchannel obstruction) leading to morbid physiology of the eye [14]. If this condition prevails for long time or no remedial measure is taken, it will manifest as a form of *Abhishyanda* one of the major pathological condition affecting all parts of the eye and becomes a cause of almost all eye diseases [15]. *Abhishyanda* also signifies the unstable phase of ocular physiology which not only gives raise to discharge per ocular surface but also deranges the internal ocular metabolism (including metabolism of avascular structure).

Triphala along with metabolic stimulant activity break the *Abhishyandatva* of the *srotas* by virtue of its *ushna* and *ruksha* properties. Not only this; the tridosha combination (*triphala*) will maintain the homeostasis in the body and eye as a whole by further preventing the pathogenesis.

Chakshusya activity of *Triphala* seems to be a overall impact of this compound on the body as a whole, but the clinical and time tested experience of our ancient scholars may be the logic behind this specific/empirical effect (*Prabhava*) i.e. *chakshusya* property, which is highlighted in all classical literatures.

On the basis of the fundamental grounds this effect can be devoted to *Deepana* (property which increases the digestive power), *Pachana* (property which help in the digestion of undigested product) and *Anulomaka* (carminative) properties of *Triphala*; improving and stimulating the *Pachaka agni* i.e *Deepana* and *Pachana* qualities produce a quality base essence of Ahara (ingested food) i.e Rasa (plasma nutrients), make it bioavailable after assimilation, easily transformable (by enhancing dhatuagni- tissue metabolism) thereby nourishes all types of *Pitta* including *Alochaka pitta* i.e. Photosensory layer of retina. The *mrudu virechaka/Anulomaka* (mild laxative/ intestinal motility enhancer) property of *Triphala* helps in the elimination of Biowastage/ Excrements as and when they are produced in the body which is always a risk factor to the avascular structure of the eye. In other words enhanced digestive and metabolic process of the body will produce the best anabolic strata for body structure and functions. There by improving the visual functions along with general body function (*Cakshusya* and *Rasayana*).

Triphala is usually a combination of equal parts of all the three fruits. But in classics depending upon the *doshic* combination and disease condition proportion of these three drugs various. While treating eye diseases the proportion of *Amalaki* is increased whereas while treating *vata* related diseases the proportion of *Haritaki* is increased.

Triphala: Rasapanchaka (Classical Pharmacodynamics)

When we look into the *Rasa panchaka* of *Triphala* formulation as a whole;

Rasa: *Kashaya rasa pradhana pancha rasa.*

Guna: *Ruksha* and *Guru* (slight)

Virya: *Ushna*

Vipaka: *Madhura*

Doshagnata [16]: Mainly used specifically in predominance of *Kapha dosha*, moderate vitiation of *Vata* and mildly derranged *Pitta*.

Rogagnata: *Kusta*, *Prameha*, *Medhoroga* and *Vishama jwara*.

Because of these properties it is used as *Dipaniya*, *Pachaniya*, *Vatanulomana*, *Hridya*, *Chakshusya* and *Rasayana*.

Form of Administration: *Kwatha* (decoction), *Churna* (pulvalise), *Ghrita* (medicated animal fat), *Varti* (collyrium) and *Guggulu* dosage forms.

Triphala in Netra roga

External/Topical use of Triphala: *Netra prakshalana*, *Netraseka*, *Vidalaka*, *Pindi*, *Aschyotana*, *Anjana*, *Tarpana* and *Putapaka* comes under *Bahirparimarjana* of *Netra roga*.

a) **Netra prakshalana** - Ocular wash/Splashing with *Triphala* aqueous solution.

Triphala possess mainly *ruksha* and *ushna* properties, hence it can be mainly used in *Kaphaja abhishyanda* and *Kaphaja vartmagataroga* (Eye lid disorders).

b) **Netra seka** - Therapeutic Ocular irrigation in closed eyes from a height of 7-8 cm [9]. Though *netra seka* with *Triphala kwatha* can act as *Tridosha shamaka*, But it comes under *lekhana Netra seka* which can be used mainly in *Kaphaja netra roga* [17].

c) **Aschyotana** - Instilling medication in drop form a height of 3-4 cm [18].

Aschyotana with *triphala kwatha* can be used in *Amavastha* of *Netra roga* also. According to *Acharya sharanagdhara* *triphala kwatha aschyotana* is said to be best in all types of *abhishyanda* [19].

d) **Vidalaka and Pindi** - Medicated application over closed eyes in paste as well as poultice form [20,21].

Triphala churna vidalaka and *pindi* is used in *shleshma pitta netraroga* [22].

e) **Anjana** - Application of medicine in conjunctival sac [23].

Triphala is one of the main ingredients in various formulations of *lekhana anjanas*.

f) **Tarpana** - Satiating eye with ghee by retaining it on eye ball and blinking continuously for a stipulated period [24].

Triphala ghrita tarpana is mainly indicated in *Kaphaja Timira* [25].

g) **Putapaka** - Pouring and withholding various form of medicated extracts prepared by specific pharmaceutical process called *putpaka* in open eyes followed by blinking continuously for a stipulated period [26].

Triphala is used as one of the ingredient in *lekhana putapaka* in *kaphaja netra rogas*.

The above said therapeutic measure's mode of action in different clinical conditions is supported by various Pharmacological studies

which reveals, Triphala has radioprotective effect, anti-inflammatory, antimutagenic, antioxidant, cytoprotective activity and it is a potential and inhibits local anaphylaxis [27].

Internal Use of Triphala

Triphala possess tridoshasamaka property, *Cakshushya* as well as good *kostha shodhaka* hence it can be jolly well used in all *Netra vikaras* for the purpose of *shodhana* (procedure by which excess accumulation of vitiated doshas from the body is removed). Hence Triphala is used as both *shaman* (procedure by which accumulation of vitiated doshas from the body is pacified) and *shodana* in day today clinical practice to prevent and manage ocular disorders. Acharayas highlighted the role of *triphala prayoga* as *shamana* mainly in *Drishtigata vikaras* (group of eye disease in which vision is mainly affected). *Triphala* is used as *rasayana dravya* in all *drishtigata rogas* only by changing the *anupana* (adjuvants) depending upon the doshic predominance. For eg: *Triphala* with *madhu*, *taila* and *ghrita* in *Kaphaja*, *Vataja* and *Pittaja Netra roga* respectively [28]. Use of *Triphala* is also quoted in drugs which prevent one from eye ailments [29]. *Triphala churna* along with *madhu* (honey) and *ghrita* (ghee) is considered to be the best rejuvenation therapy for eye disorders [30].

Various studies has also been reported regarding the efficacy of *triphala* in eye disorders like Cataract Gupta SK [31] Diabetic retinopathy Lu et al. [32] and Age related macular degeneration Ponnushanker et al. [33]

Triphala: Yogas (Formulations)

Famous *yogas* containing *Triphala* as main ingredient, which are utilized in day today ophthalmic practice are *Triphala Churna*, *Sadanga kwatha guggulu*, *Triphaladi kwatha*, *Triphaladi anjana*, *Triphala varti*, *Triphaladi rasakriya*, *Nagarjuna varti*, *Kokilavarti*, *Drustiprada varti*, *Candhanadi varti*, *Lohadi guggulu*, *Timirahara lauha*, *Saptamruta loha*, *Triphaladi ghrita*, *Mahatriphaladi ghrita* and *Triphala Guggulu* [31].

Thus *Triphala* can act as a wonderful drug in maintaining the ocular health and mange the ocular disease. By adopting *Triphala* as a part of dietic regimen, one can be free from ocular disorders and live a disease free life.

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