



KRIYAKALPA: THE UNIQUE MANAGEMENT OF EYE DISORDERS USING AYURVEDIC PRINCIPLES.

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ABSTRACT

In Ayurveda, the aim of the science is mentioned as “*Swasthasya Swasthyarakshanam Aturasya Vikarprashaman*” which when translated, conveys the meaning of “To maintain the health of a healthy individual and cure the disease in the diseased”. The great *Ayurvedic Acharya* has mentioned in the *Samhita* that the eye is ranked as one of the most important organ amongst all: “*Sarvendriyanam Nayam Pradhanam*”. It is of utmost importance to maintain the health of the eyes and alleviate any disorders in an effective manner. The *Acharya* have described detailed local therapeutic procedures to administer and cure ophthalmic disorders in simple but effective methods. *Acharya Susruta* termed them as ‘*Kriyakalpa*’. *Kriyakalpa* is the treatment that refers to the procedures in which medications/drugs are applied in or around the eyeball as a method of treatment. It is very necessary to keep the eyes healthy, because without sight the world becomes dark for the individual. As such, in this article we will expound briefly the various *Kriyakalpa* and various formulations mentioned in *Ayurveda*.

KEYWORDS: *Ayurveda, Kriyakalpa, Netra Roga, Panchakarma.*

INTRODUCTION

The eyes are one of the most important organs present in the human body since it is through the vision that humans are able to gain knowledge, interact socially and develop intellectually. The most important thing to be able to see this beautiful world is through the eyesight. Because for those without sight, day and night become the same. Even *Acharya Vagbhata*,^[1] stated that the other sense organs depend on eyesight for their accuracy. Hence it is of utmost importance to maintain the proper functioning of the eyes through *Kriyakalpa*.

The word ‘*Kriyakalpa*’ itself consists of two distinct and separate words which are ‘*Kriya*’ and ‘*Kalpa*’. *Kriya* refers to the therapeutic procedures that are undertaken or carried out to cure the disease and the word *Kalpa* refers to the specific medicine or formulation that is selected for use in that specific disease indication.

In Ayurveda, “*Chikitsa*” means the treatment that is used and it is classified into 3 types, known as *Trividha Chikitsa*. It consists of (i) *Antahparimarjana*- treatment done to cleanse or purify from within (ii) *Bahyaparimarjana*- treatment done to cleanse from external means and (iii) *Shastrapranidhana* - treatment that involves surgical intervention. *Kriyakalpa* is a

Bahyaparimarjana Chikitsa (External Therapy) and it has many advantages.

Panchakarma procedures are known as *Antahparimarjana Chikitsa* i.e. purification of the internal body organs. While there is no specific treatment for any organ mentioned, *Kriyakalpa* are a unique treatment modality known as *Bahyaparimarjana Chikitsa*,^[2] which directly treats the organ known as the eyes. As the *Netra* (eye) is a very vital and sensitive organ of the body, *Kriyakalpa* was described and elaborated to deal specifically with problems and diseases of the eyes.

Kriyakalpa procedures when adopted follow the protocol of *Purvakarma* (Pre-treatment), *Pradhaankarma* (Main treatment) and *Paschatkarma* (Post-treatment). *Purvakarma* includes *Panchakarma* procedures to remove vitiated *Dosha* from the body, following which, the selected *Kriyakalpa* is then administered to remove any remaining *Dosha* as *Bahyaparimarjana Chikitsa*. *Pradhaankarma* is the actual type of *Kriyakalpa* administered and *Paschatkarma* includes the rules and regulations to be followed after the procedure e.g. *Samsarjana Krama* (Dietary regime).

Various *Acharya* have mentioned about *Kriyakalpa* (Ocular therapeutic procedures) and some of them correspond with one another, which essentially benchmarks and concretizes its efficiency and utility in maintaining and curing diseases of the eyes.

Kriyakalpa are basically the procedures that are described where medicated *Ghee* and *Churna* (powdered formulations) are administered either directly or indirectly (above or around) the eyes as an effective treatment modality.^[3]

According to *Acharya Susruta*, he has clearly mentioned 5 types of *Kriyakalpa* which are.^[4]

1. *Tarpana* (Therapeutic retention of medicated liquids over the eyes).
2. *Putapaka* (Installation of medicated juices in the eyes, which is extracted after heating a bolus of herbs, along with goat meat, to get the concentrate juice of the herbs).
3. *Seka* (Ocular therapy by streaming).
4. *Anjana* (Collyrium).
5. *Aschyotana* (Eye drops).
6. In addition to these five *Kriyakalpa*, *Acharya Sharangdhara*, added the following two to the list.^[5]
7. *Pindi* (Fastening medicinal bolus to the eyes).
8. *Bidalaka* (Application of medicated paste on the outer part of eyes).

Sharangdhara, named them as “*Netra Prasadana Karma*,”^[6] (The treatment that is helpful to the eyes, without producing any harmful or untoward side effects)

Materials and Methods

Various literature about *Kriyakalpa*, from various *Samhita* and published literary material, were collected, studied, discussed at length and conclusions drawn are presented here.

[1] *Aschyotana*: - is the first line of treatment in all eye-related disorders,^[7] Usually, the medicine, (medicated ghee or drops) are instilled into the eyes that are kept open. The prescribed height from which this should be done is mentioned as 2 *Angula*,^[8] and it should be retained in the eyes for 100 *Vakmatras* (Time duration for pronunciation of one alphabetic letter). The widely used *Ayurvedic* medicinal formulations for *Aschyotana* are *Triphala Kwath* (a decoction of *Amalaki* (*Embolia officinalis*), *Bibhitaki* (*Terminalia bellerica*) and *Haritaki* (*Terminalia chebula*), cures all types of diseases. *Aschyotana* with *Stri Stanya* (Breast milk) relieves *Raktapitta* and pain due to *Vata Dosha*. In the same way, *Ghee* prepared by churning of *Ksheera Sarpi* also aids in relieving eye pain due to *Vatarakta*. Some specific formulations mentioned according to *Dosha* are presented in the Table 1 below.

Table 1: Formulations Mentioned According to Dosha.

Dosha	Yoga
Vata	Decoction prepared from <i>Brihat Panchamula</i> : <i>Bilva</i> (<i>Aegle marmelos</i>) <i>Agnimantha</i> (<i>Premna mucronata</i>), <i>Shyonaka</i> (<i>Oroxylum indicum</i>), <i>Patala</i> (<i>Stereospermum suaveolens</i>) <i>Gambhari</i> (<i>Gmelina arborea</i>) and <i>Brihati</i> (<i>Solanum indicum</i>), <i>Eranda</i> (<i>Ricinus communis</i> L). and <i>Sigru</i> (<i>Moringa oleifera</i> Lam.)
Vataj, Pittaj & Raktaj	<i>Netrapurana</i> with juice extracted from paste of <i>Lodhra Twak</i> (<i>Symplocos racemosa</i> Roxb.) covered by the paste of <i>Nimba Patra Kalka</i> after drying and heating on fire.

It can be done in the following conditions: foreign body sensation, irritation and redness of the eye, itching of the eye, painful and watery eyes and burning sensation of the eyes. It is advised to be done only during the daytime.

Aschyotana classification according to *Dosha* involvement and its corresponding dosage,^[9] is presented in Table 2 below:

Table 2: Dosha Involvement and its Corresponding Dosage.

Karma	Dosha	Dosage	Time	Drug Properties
<i>Snehana</i>	Vata	10 drops	Evening	<i>Tikta, Snigdha</i>
<i>Ropana</i>	Pitta	12 drops	Afternoon	<i>Madhura, Sitala</i>
<i>Lekhana</i>	Kapha	8 drops	Morning	<i>Tikta, Ushna, Ruksha</i>

[2] *Anjana*: - In this *Kriyakalpa*, the medicine is usually applied in the form of a collyrium. It is commonly applied to the internal surface of the lid margin, using *Anjana Salaka* (Ophthalmic probe) starting from the *Kanineeka Sandhi* (inner canthus) and continuously applying it until the *Apanga Sandhi* (outer canthus) is reached,^[10]

undergone *Shodhana* (bio-cleansing therapies) of *Vamana* (therapeutic emesis) and *Virechana* (therapeutic purgation) when the *Nirama Doshas* are causing eye diseases.

Anjana is classified according to *Dosha* and the suitable time of administration,^[11] as shown in the Table 3 below:

It is usually indicated for *Dushti Prasadana* (Improvement of vision) & to those patients that have

Table 3: Anjana According to Dosha and Time of Administration.

Anjana Type	Dosha	Time Period	Drug Properties
Prasadana Anjana or Prasadanjana	Vata Dosha	Should be done in the evening period.	Amla, Lavana Rasa
Ropana Anjana or Ropanjana	Pitta Dosha	Performed in the night period.	Tikta, Kashaya Rasa
Lekhana Anjana or Lekhanjana.	Kapha Dosha	Performed in the morning period.	Katu, Tikta, Kashaya Rasa

Some of the pharmaceutical preparations of Anjana mentioned by Acharya Sharangdhara are Gutikanjana, Rasanjana and Churnanjana and these are applied to the eyes using Anjana Salaka. Each succeeding preparation

is weaker in efficacy than its predecessor, hence selection of the preparation should be based on the vitiation of the respective Dosha. The doses of these are presented in the Table 4 below.

Table 4: Anjana Type and Dosage.

Anjana Preparation	Dose
Gutikanjana	<ul style="list-style-type: none"> • Tikshna: 1 Harenu • Madhyama: 1 ½ Harenu • Mridu: 2 Harenu
Rasakriyanjana	<ul style="list-style-type: none"> • Uttama: 3 Vidanga Pramana • Madhyama: 2 Vidanga Pramana • Hina: 1 Vidanga Pramana
Churnanjana	<ul style="list-style-type: none"> • Virechanika: 2 Salakas • Mridu: 3 Salakas • Snehaika: 4 Salakas

The specific time of day is mentioned due to the fact that during the night time (causes blockage of vessels) and during the day time (due to the intensity of the sun's rays) the eye becomes weakened, so they suggest that Anjana be done both in the morning and evening. The period in the morning time should ideally be done during Kapha Shamana Kaal and in the evening, ideally during the Pitta Shamana Kaal. But according to Acharya Susruta, it is mentioned to perform Anjana in the morning for Kapha Dosha, in the evening for Vata Dosha and night time for Pitta/Rakta Dosha.

Procedure for Anjana,^[12]

Firstly, the medication and dose should be selected according to the purpose. Then, when the Anjana is prepared, it should be carefully applied to the eyes on the lid margins. After which, the patient should be advised to gently close the eyes and slowly and gently rotate the eyeball so that the Anjana may be spread all over the eyeball to get maximum treatment efficacy.

Opening and closing of the eyes and rubbing of the eyes are contraindicated during this time. After some time, when the gritty feeling has subsided, Netra Prakshalan should be done with a decoction of Chakshushya Dravyas.

Some important Anjana formulations used are: Candrodaya Varti, Karanja Varti, Samudraphenadi Varti, Danta Varti, Nilotpala Varti, Puspa Varti, Rasanjana Varti, Dhatriyadi Varti, Rasakriya, Lekhani Rasakriya, Atinindrahara Anjana, Prabodhana Anjana, Darvyadi Rasakriya, Rasanjanadi Rasakriya, Guduchi Rasakriya, Punarnava Rasakriya, Babbula Rasakriya,

Hijjala Rasakriya, Kataka Rasakriya, Sirotpatari Rasakriya, Krisna Sarpavasa Rasakriya, Lekhananjana, Kana Rasakriya, Churnanjana, Ropana Churnanjana, Prasadanjana (Sauviranjana), Naga Salaka, Pratyanjana, Nayanamritanjana, Sanjivananjana, Dristi Prasadana Yoga, Sitambu Prayoga.

[3] Bidalaka

In Bidalaka, the selected medicated paste is applied directly to the outer surface of the closed eyes, on the eyelids, except the eyelashes,^[13] for a specified time period.

It is classified into 3 types according to the thickness of the paste being applied. Viz: Uttama (Best), Madhyama (Moderate) and Hina (Minimum). Bidalaka is also indicated in acute stages of eye diseases and it relieves burning sensation, swelling, watery discharges, redness, pain etc.

Bidalaka Yoga

1. Bidalaka prepared from paste of equal quantity of Yasthimadhu (*Glycyrrhiza glabra*), Gairika (Red Ochre), Saindhava Lavana, Daruharidra (*Berberis aristata*) and Svarna Makshika (Copper pyrite) and triturated with water, cures all types of eye diseases.
2. If prepared from the paste of Lodhra (*Symplocos racemosa* Roxb.) and Saindhava Lavana, burnt to ashes and mixed with Madhucchista (Bee's wax) and Madhu (honey) quickly relieves Netra Ruja (pain in eyes).
3. With the paste obtained from the pulp of Nimba Phala by rubbing in an iron vessel relieves Netra Ruja (pain in eyes).

4. With paste prepared from *Maricha Churna* (*Piper nigrum*) and *Bhringaraja Swarasa* (*Eclipta alba* Linn. Hassk.) cures *Arma* (pterygium).
5. *Bidalaka* with paste made from *Manasila* (realgar), *Ela* (*Elettaria cardamomum*), *Haratala* (arsenic trisulphide), *Saindhava Lavana* and honey is advised for *Anjananamika* (External Hordeolum) after *Swedana* and *Bhedana* for wound healing.

[4] Pindi

This is a slightly modified application of *Bidalaka*, where the medicated paste is wrapped in a thick cotton

bandage or *Doshaghna* leaves and then kept in tightly over the closed eyelids.^[14]

It relieves symptoms such as *Netra Abhishyandi*, *Adhimantha*, *Shotha*, *Netra Kandū*,^[15] etc, but also indicated in acute stages of all eye diseases.

Pindi Yoga

Acharya Sharangdhara mentioned a few *Pindi* formulations according to *Dosha*, which are enlisted in the Table 5 below.

Table 5: Pindi Formulations According to Dosha.

Dosha	Yoga
Vata	<i>Erand Patra Mool</i> (<i>Ricinus communis</i> L – leaves, roots)
Pitta	<i>Mahanimba Phala</i> (<i>Melia azedarach</i> fruit)
Kapha	<i>Sigru Patra</i> (leaves of <i>Moringa oleifera</i> Lam.)
Kapha/Pitta	<i>Nimba Patra</i> (leaves of <i>Azadirachta indica</i>) or <i>Triphala</i> [<i>Emblica officinalis</i> (<i>Amalaki</i>), <i>Terminalia bellerica</i> (<i>Bibhitaki</i>), and <i>Terminalia chebula</i> (<i>Haritaki</i>)]
Rakta	<i>Lodhra</i> (<i>Symplocos racemosa</i> Roxb.) and <i>Kanji</i>
<i>Netra Kandū and Sotha</i>	<i>Sunthi</i> (<i>Ginger/Zingiber officinale</i>), <i>Nimbadala</i> and <i>Saindhava Lavana</i>

[5] Tarpana

This gives nourishment therapy to the eyes and cures *Vata/Pitta Vikara* (preventive as well as curative aspects) by its application. The *Ghee* is kept directly over the open eyes and patient is advised to rotate the eyeballs.

The medication is usually *Ghee* and it is held in place by a flour dough or by a special *Yantra* goggles.^[16] There are different *Aushadha Dharana Kaal* for different conditions as explained in Table 6 below.^[17]

Table 6: Aushadha Dharana Kaal for Different Conditions.

According to Site of Lesion	Time
<i>Sandhigata Roga</i>	300 <i>Matra Kaal</i>
<i>Vartamagata Roga</i>	100 <i>Matra Kaal</i>
<i>Shuklagata Roga</i>	500 <i>Matra Kaal</i>
<i>Krishnagata Roga</i>	700 <i>Matra Kaal</i>
<i>Dristigata Roga</i>	800 or 1000 <i>Matra Kaal</i>
<i>Sarvagata Roga</i>	1000 <i>Matra Kaal</i>
According to Dosha	Time
<i>Vataj Roga</i>	1000 <i>Matra Kaal</i> for 1 day
<i>Pittaj Roga</i>	800 <i>Matra Kaal</i> for 3 days
<i>Kaphaj Roga</i>	500 <i>Matra Kaal</i> for 5 days
In Healthy Individuals	Time
<i>Swastha</i>	500 <i>Matra Kaal</i>

Before doing *Tarpana*, *Kaya Shodhana* by *Vamana*, *Virechana*, *Basti*, *Raktamokshana* or *Shiro Shodhana* with *Nasya* should be done.

the level of the eyelashes and when this level is reached, the patient is advised to open and close his eyelids slowly up to the specified time, indicated above.

The main procedure should be done in either the morning or evening. The room should be *Rajo Dhooma Rahitha* (Without dust or smoke) and *Prakaasavan* (with bright light). The patient is asked to lie supine, the paste of *Yava* or *Masha* is set around the eyes, making an enclosure, at a height of about 2 inches, this prevents the medicine from leaking out. The medicine is made warm in a water bath and then carefully poured over the eyes, while the eyes are kept closed. Medicine is poured up to

Some complications that can occur are; feeling heaviness in the eyes, visual disturbances, excessive oiliness, watering of eyes, itching sensation and stickiness due to excessive discharge.

After the specified time of *Tarpana* has elapsed, the medicine should be removed by making a perforation in the paste of *Masha*, usually done at the temporal side. The eyes are then cleaned with *Yava Pista*, *Ushnodaka*

(lukewarm water) *Prakshalana*, *Shiro Virechana*, *Dhoomapana* to save the eyes from any *Kaphaj* disorders. The patient is then advised to refrain from looking at bright items like mobile phones, television etc.

The signs of proper *Tarpana* procedure are: tolerance to light, health, lightness in eyes, sound sleep, normal complexion of parts, easy opening and closing of eyes. Excessive procedure causes heaviness in eyes, dirt collection on eye, oiliness, epiphora, itching sensation, sticky debris in eye and *Kapha* complication. The signs on lesser procedure are; roughness, dirtiness, lacrimation, aggravation of the diseases and indistinct vision.

Table 7: Putapaka, According to Dosha.

Putapaka Types	Dosha	Ingredients Used	Duration
<i>Snehana Putapaka</i>	<i>Vataj</i> disorders	<i>Sarpi, Mamsa, Vasa, Meda, Madhura Aushadies.</i>	200 <i>Matra Kaal</i>
<i>Lekhanya Putapaka</i>	<i>Kaphaj-Vataj</i>	<i>Jangala Desha Yakrit, Krishna Loha, Tamra, Sankha, Vidruma, Saindhava Lavana, Samudra Phenā, Kasisa, Dadhi Mastu.</i>	100 <i>Matra Kaal</i>
<i>Ropaneeya Putapaka</i>	<i>Vataj-Pittaj-Raktaj</i>	<i>Stanya, Jangala Mamsa, Madhu, Ghrita, Tikta Dravyas.</i>	300 <i>Matra Kaal</i>

[7] *Seka*

Medicine is poured in *Suksma Dhara* (Thin stream) over the closed eyes continuously from a recommended height of 4 *Angula*, for a specified time,^[20] according to the *Dosha* involved. Usually it is done during the day time but in emergency situations it can be performed at night also. It is indicated for acute conditions like itchy eyes, watery eyes, conjunctivitis, burning eyes, dry eyes and photophobia. *Seka* is beneficial in those disease conditions that cannot be alleviated by the use of *Aschyotana*. After this procedure, the eyes should be washed with lukewarm water and it is advised to refrain from looking at bright items like mobile phones, television etc.

Table 8: Seka Yoga according to Dosha.

Dosha	Yoga
<i>Vata</i>	Decoction prepared from <i>Aja Dugdha</i> (Goats milk), <i>Eranda Mool</i> (<i>Ricinus communis</i> L-roots), <i>Eranda Twak</i> (<i>Ricinus communis</i> L - bark), <i>Eranda Patra</i> (<i>Ricinus communis</i> L - leaves), is used <i>Sukosna Seka</i> . (<i>Ricinus communis</i> L is commonly known as Castor Oil Plant)
<i>Pitta & Abhigataja</i>	The powder prepared with equal quantities of <i>Sabara</i> (<i>Symplocos racemosa</i> Roxb.), fried <i>Madhuka</i> (<i>Madhuca longifolia</i>) with <i>Ghee</i> boiled in <i>Chaga Ksheer</i> (Goats milk) is used for <i>Seka</i> in <i>Pitta</i> and <i>Abhigataja Netra Roga</i> .
<i>Rakta</i>	1) The paste prepared with <i>Triphala</i> , <i>Lodhra</i> (<i>Symplocos racemosa</i> Roxb.), <i>Yasthimadhu</i> , <i>Sarkara</i> and <i>Bhadra Musta</i> mixed with cold water and filtered is effective. 2) The paste prepared with <i>Laksha</i> (<i>Laccifer lacca</i>), <i>Madhuka</i> , <i>Manjistha</i> , <i>Lodhra</i> (<i>Symplocos racemosa</i> Roxb.), <i>Kalanusariva</i> and <i>Pundarika</i> is macerated with cold water is also effective here.
-	<i>Ghrita Bhrista Lodhra Churna</i> (<i>Symplocos racemosa</i> Roxb.) mixed with warm water and used as <i>Seka</i> pacifies pain in the eyes.

Classification^[21]

- *Snehana* in *Vataj Dosha* for 400 *Matra Kaal*.
- *Ropana* in *Pittaj & Raktaj Dosha* for 600 *Matra Kaal*.

[6] *Putapaka*

Ghee or *Swarasa* (usually extracted by *Putapaka Vidhi*)^[18] is kept over the eyes for a specified time. The medicines can be simple. *Putapaka* indication is similar to *Tarpana* as it can be done in all conditions that is indicated for *Tarpana*. It is used for rejuvenation of the eyes, after the eyes gets fatigued (especially after doing *Tarpana*).^[19]

Classification

Putapaka is classified into 3 types, according to *Dosha*, and the specific ingredients and time duration are clearly mentioned as seen in Table 7 below:

Samyak Seka Lakshana

Some of the indications that *Seka* has been properly done are: *Roga Nivrutti* (Gets relief from disease), *Swabhavika Varna* (Getting natural color), *Karya Padutwam* (Normal functioning of eyes) and *Vedhana Santhi* (Relief from pain etc.).

Seka Yoga

These are according to *Dosha*, and the specific formulations are clearly mentioned as seen in the Table 8 below:

- *Lekhana* in *Kaphaj Dosha* for 300 *Matra Kaal*.

Mode of Action

There are many studies available regarding the mode of action of *Kriyakalpa*, but the following train of thoughts are noteworthy. It is the *Virya* and *Vipaka* of the drug that brings relief when applied locally to the eyeball, by coming into direct contact with the layers of the eyeball and The locally applied drug reaches the conjunctival sac, fornices, inner and outer canthi, nasal cavity and blood vessels and hence brings about therapeutic effects both locally and systematically.

The ocular pharmacology of the various *Kriyakalpa* mentioned can be delivered by the following methods.^[22]

1. Topical instillation
2. Peri-ocular injection
3. Intra-ocular injection

Medications in the form of drops and ointments and gels can be applied directly to the conjunctival sac. The medications applied through this route are readily absorbed, since the mucous membranes are good absorbing surfaces. This route proves very effective since in the systemic route there is the limitation presented by the blood-aqueous barrier. Hence it can be deduced that the *Ayurvedic Acharya* had knowledge about the blood-aqueous barrier even in their time, without the sophisticated technology available today.

DISCUSSION

In *Ayurvedic* therapies, we are applying *Kriyakalpa* ophthalmic therapeutics in the form of local administration of medications. The main objective of the *Kriyakalpa* is the attainment of an effective concentration of the medicament at the local site, for a specified time, to elicit a response that alleviates or eliminates the disease. The drug is usually chosen after careful assessment of the *Dosha* by the *Vaidya* and its role in the diseases being managed. The *Kriyakalpa* thus selected seeks to ensure maximum absorption of the drug and to bring about relief/cure of the disease in the most effective manner. *Kriyakalpa* explained by *Acharya* are comprehensive and most effective. Even in ancient times, without sophisticated equipment, the *Acharya* were able to develop these treatment modalities which are still applicable in today's era. They have carefully outlined the procedures and formulations to be used in each diseased condition as well as which procedure can be used to maintain the health of those with healthy eyes. They have been so meticulous in their treatment protocols that they have even outlined the time of day of administration, the duration of the procedure and specific formulations for each type of disease/disorder. The treatment procedures are so comprehensive that it is even mentioned the signs and symptoms observed when the procedures are properly done, when it is done in lesser manner or done in excess. This makes *Kriyakalpa* a total and complete treatment modality in the management of eye diseases and eye care.

CONCLUSION

In this current review article, *Ayurvedic Kriyakalpa* (ocular therapies) explained by ancient *Acharya* are expounded. As the eyes are one of the most important organ in the body. The *Kriyakalpa* mentioned seeks to target the treatment of eye diseases using many of the methods illustrated above. The distinctive feature of *Kriyakalpa* is that various medications/ formulations can be selected according to the stage of the disease and then it can be applied through any one of the *Kriyakalpa* mentioned, according to the need and the suitability. With the help of new technology *Ayurvedic* scholars can study *Kriyakalpa* and certainly *Ayurveda* will get the global platform to aid in the suffering humanity. As with any procedures or *Karma* in *Ayurveda*, there should be some justification to at least understand the probable effect of the *Kriyakalpa* mentioned thus, future clinical studies can possibly aim to correlate these procedures with modern parameters so as to get a firm scientific outlook.

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