

Akshi Kriyakalpa: Ocular Therapeutics in Ayurveda

N. S. Abegunasekara

Department of Ayurveda Basic Principles, Gampaha Wickramarachchi
Ayurveda Institute, University of Kelaniya, Yakkala, Sri Lanka

ABSTRACT

Wonderful development made in ophthalmic medicine in recent years has begun a new era in the history of ophthalmology. Modern ophthalmologists and scientists have been able to convince the new generation about the significance of eye care and the right procedures to follow to ensure healthy vision. At the same time, there are various challenging problems, arising before modern ophthalmologists compelling them to tread the virgin fields of medical knowledge hidden in ancient medical manuscripts. Many are aware of various eye ailments and remedies. But the impact of Ayurvedic treatments for these ailments is yet to be recognized by both medical fraternity and the public in general. One such Ayurvedic ocular therapeutic is Kriyakalpa. "Kriyakalpa," has a very superior position as it is tissue targeted, fast acting, simple but innovative method of drug administration to various parts of eyes including the posterior segment, the optic center, visual pathway also. Different types of Kriyakalpa, their indications and probable mode of action have been discussed in present review article.

Keywords: Kriyakalpa, Ocular pharmacology, Eyes

INTRODUCTION

In wake of current resurgence of elective medications in a worldwide situation, Ayurveda has too looked for its fruitful development to numerous nations counting Europe and US. In spite of its potential to be dispersed as a healthcare framework which is prudent, eco-friendly and is determined from the characteristic sources utilizing the locally accessible assets, is slacking behind to other modern framework of pharmaceutical. The reasons recognized for this state of condition are basically destitute quality of drugs and need of well-defined code of hone significant to the modern framework. Need of standardization is considered as the greatest trap within the development and dispersal of Ayurveda. Standardization of Ayurvedic drugs is taken up on need premise these days. WHO has surrounded a code of Medicate Fabricating Hone in Ayurveda. But, separated from herbs, minerals and herbo-mineral compositions, Ayurveda too utilizes certain physico-biological methods (physical strategies having their moment or remedies). We ought to make endeavors to ensure the eyes, all through our life; for the man who is daze this world is futile, the day and night are same indeed in spite of the fact that he may have riches. "SarvendriyanamNayanamPradhanam" i.e. eyes hold extraordinary status among all the sense organs. Eyes are the foremost valuable blessing of the God to the living creatures. Great vision is pivotal for social and mental advancement of a individual. Ayurveda the wellspring head of Indian pharmaceutical was conceived as a science and lectured within the nation a few thousand of a long time prior, long some time recently the other nations might dream of systematizing the concept of cures for human afflictions. Shalaky Tantra is one among eight specialties of

Ashtanga Ayurveda, which bargains with the maladies happening over the clavicle. Therefore, it primarily bargains with the sense organs; infections influencing them and their administration. Acharya Nimi is considered as the expounder of this department of Ayurveda.

Methodology

Data was collected using Ayurveda treaties and secondary sources of information such as books and World Wide Web. After that data was analyzed.

Results and Discussion

Kriyakalpa is the main therapeutic process for ophthalmology in Shalaky tantra, as the Panchkarma is the bases of Kayachikitsa. The word Kriyakalpa built from two words: Kriya and Kalpa. Kriya means therapeutic procedures for chikitsa used to cure the disease and Kalpa means practicable, possible, manner of acting, a prescribed rule. So Kriyakalpa means specific formulation used for therapy in Ayurvedic Ophthalmology. It includes selection of specific procedure, preparation of special drug form and finally its proper application to the eyes. Acharya Susruta mentions Tarpan, Putapaka, Seka, Aschyotanam and Anjanam under the heading of Kriyakalpa. Acharya Vaghbata and Sarangdhara add Pindi and Vidalaka in them. Acharya Charaka had also told about Vidalaka.

In Ayurvedic classics, different types of indications are given for different Kriyakalpas. These are as follows.

Tarpana- Tarpana is indicated especially in Vata-Pita dominating personalities suffering from eye disease. The

How to cite this paper: N. S. Abegunasekara "Akshi Kriyakalpa: Ocular Therapeutics in Ayurveda" Published in International Journal of Trend in Scientific Research and Development (ijtsrd), ISSN: 2456-6470, Volume-5 | Issue-1, December 2020, pp.439-442, URL: www.ijtsrd.com/papers/ijtsrd37962.pdf



Copyright © 2020 by author(s) and International Journal of Trend in Scientific Research and Development Journal. This is an Open Access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0) (<http://creativecommons.org/licenses/by/4.0>)



word "Tarpana" is derived from the root "Trup" by adding the "Lyut" Pratyaya. The literary meaning of the Tarpana is to give nourishment to the eye through Ghrita, Ghrita Manda, medicated Ghrita, Vasa, Majja, (bone marrow), milk etc.

Indication for Tarpana Karma -

- When a patient sees darkness / blackouts in front of eyes
- In severe dryness of the eyes
- Much roughness of the eyes
- Stiffness of the eyelids
- Falling of eye lashes / Madrosis
- Dirtiness of the eyes / Altered or lost lusture of ocular surface
- Deviated Eye Ball / Squint
- In extreme aggravation of the diseases of the eye

Vagbhatta has further added a list of diseases specifically in the indications of Akshi - Tarpana.

Kricchronmeelana, Siraharsha, Sirotapata, Arjuna, Shukra, Timira, Abhishyanda, Adhimantha, Anyatovata, Vataparyaya, Vatika and Paitika diseases of eyes, Injured eyes due to Abhighata.

Ghrita prepared from Kwatha of Kashmarya, Madhuk, Kumuda, Utpala, Urupaga, Kushtha, Brihati, Tamala, Mamsi, Sariva, Prapaundarika, Darbhamula, and Kasheru in milk. This Ghrita can be used for Tarpana.

By using Aja Yakrita, Agar, Priyangu, Nalada, and Devadaru prepare Ksheerapaka. Navaneeta from the curd obtained from this Ksheerapaka is used for Tarpana..

Probable Mode of Action of Akshi - Tarpana: Ghrita is supreme in Jangama Sneha and is Balavardhaka, Ojovardhaka, Vayasthapana, Agni Deepana and Dhatuposhaka. By virtue of its Sanskaranuvartana property, it attains the properties of ingredients without losing its own. Acharya Charaka in SutrasthanaSnehadhyaya explained that, "SnehoanilamHanti" which means that Snehana is the supreme treatment for VataDosha. He mentioned Akshi - Tarpana as one of the 24 Snehapravicharana in Sutrasthana 13th chapter. According to Charaka, Ghrita is effective in subsiding Pittaja and Vataja disorders; it improves Dhatus and is overall booster for improving Ojas.

Putapaka- It is indicated when eye get fatigued after the Tarpana, i.e. for rejuvenation of eyes. Putapaka is used to give energy to the eyes to overcome from fatigued stage. Putapakayogas are-

- Putapaka prepared from Nimba Patra and Lodhra with Jala
- Juice of cooked Aja Yakrita, camel, pig with Pippali, Saindhava, Madhu and Ghrita prepared as Putapaka method. This Ghrita can be used for Tarpana.

Seka- Indicated in severe eye affections [18] i.e. in acute condition of eye diseases.

- Seka Yogas are:
- Seka can be done with Putapaka Rasa prepared by Pathya, Aksha, Amalaki, bark of Khakhasa.
- Seka can be done with Aja Ksheera with added SaindhavaLavana

- Kwatha prepared by AanoopaJalamamsa.
- Kwatha prepared by Vata mitigating drugs can also be used.
- Seka can be done with Vasa, Taila, Ghrita and Majja.
- Seka can be done with KantakariKwatha and Madhu.
- Shigru Patra Swarasa and Madhu can be used for Seka.
- Seka can be done with milk mixed with Saindhava.
- Seka can be done with DaruharidraKwatha with added Saindhava.
- Kwatha prepared by Moola and Twak of Eranda in Aja Ksheera.
- Kwatha prepared by Kantakari Moola in Aja Ksheera.

Aschyotana-All Acharyas have given due importance while Acharya Vagbhatta quoted it as an AadyaUpakrama - foremost procedure in treatment of all the eye diseases. It is safe as well as most economical procedure. It eliminates the Doshas from all parts of eyes effectively.

AshchyotanaYogas are

- Kwatha prepared by Milk and AushadhaDravyas like SaindhavaLavana, Udichya, Yastyhva, Pippali can be used.
- Kwatha prepared by AushadhaDravyas like Tagar, Hribera, Vakra, Manjishtha and bark of Udumbara in Aja Ksheera and water can be used.
- Kwath prepared by BilvadiPanchamool, Eranda, Bhrihati, Tarkari and Madhushigru can be used.
- Putapaka Rasa prepared by Lodhra bark, it can be used.
- TriphalaKwatha, plain Ghrita and Breast milk also can be used.
- AmalakiSwarasa can be used.
- Shigru Patra Swarasa can be used with honey and SaindhavaLavana.
- Rasanjan can be used.
- Juice of Fresh leaves of Karavira.
- Kwatha of leaf, root and bark of Eranda in Aja Ksheera.
- Kwatha prepared in Aja Ksheera with Root of Kantakari can be used.
- Kwatha prepared from Shaliparni, Prispiparni, DwiBrihati, Madhuka.
- Kwatha prepared by DwiAmsumati, Brihati and Kantakari in Sura, Mudga and Dhanyamala.

Anjana - It is applied when the doshas are located only in the eyes and when the symptoms and signs get started according the involvement of doshas. It is indicated in Pakwaawastha of eye disorders. It is indicated not only in diseased eye but also in the normal eyes to maintain the visual power properly. It is effective in Lakshanas like Vedana, Ragata, Daha, and Shotha. It has direct action on the ocular tissues especially on conjunctiva, so it is useful in conjunctival disorders. It flushes out debris and unwanted tissue due to its Lekhan property.

Anjana yogas are

- Varti prepared in milk by Kasmarya, Madhuka, Kumuda, Utpala, Urupuga, Kustha, Brihati, Tamala, Mamsi, Sariva, Prapaundarika, Darbhamula, and Kaseru[46].
- Pathyanjana prepared by Sphatika, Sankhanabhi, Madhuka and Gairikamacerated in sugarcane juice, dried it and makes pills. These pills can be used.
- Curd kept in silver vessel, after it becomes blue, dry it and prepare pills. These pills can be used.

- Anjana can be done with Madhuka, Rajani, Pathya, and Devadaru macerated with Aja Ksheera.
- Anjana can be done with Gutika prepared by Gairika, Saindhava, Krishna and Nagar macerated in water.
- Anjana can be done by Ghrita, kept in a copper vessel and added with Saindhava.
- Anjana can be done with Vasa of marshy and aquatic animals added with Saindhava.
- Souviranjana also can be used.
- Thin sheets of Naga heated red and immersed in decoction of Triphala and juices Bhringaraja, Shunthi, Ghrita, cow"s urine, Madhu, Aja Ksheera can be used.
- NayanaamrutAnjana - Naga and Suta melt with equal amount of Krishn Anjana + 1/10th part of Karpura can be used.

Pindi- It is also called Kawalika⁵⁶. Indicated in abhisyandha and oedema, itching and ocular pain.

pindiyogas are

- Triphala and KhakhasaValkala mixed with AhiphenaDravya can be used.
- Twak and Moola of Eranda with Ghrita can be used.

Vidalaka - It is also indicated in the early stage of disease.

- Paste of Kustha, Misi, Pippali, Chandana and Utpala can be used.
- Paste of Musta, Agar and Chandana can be used with Madhu.
- Paste of LodhraTwak prepared with 2 parts of Maricha and 1 part of Manahshila, YastiMadhu, Satapushpa and Anjana can be used.
- Paste of Saindhava, Agar, Trijataka, TriKatu, Svarnagairika, Kustha and Tagara can be used.
- Paste of Chandana, Maricha, Patra, Ela, Suvarnagairika, Tagara, RasAnjana, Lavana and Yastyahva can be used.
- Paste of SaindhavaLavana, Daru Haridra, Gairika, Kapattya and RasAnjana can be used.
- Paste of SvarnaGairika, Rakta Chandana, Daru Haridra, and Vacha can be used.
- Paste of Lodhra and Ghrita can be used.
- Paste of Amalaki, Lodhra, Ghrita, realgar can be used.
- Paste of Yasti, Gairika, Saindhava, Darvi, and Tarkshya can be used.
- Paste of Pathya can be used.
- Paste of Kumari and Chitraka can be used.
- Paste of Dadima Patra can be used.
- Paste of Vacha, Haridra and Nimba can be used.
- Paste of Lodhra, Saindhava, bees wax and Madhu can be used.

Clinical Features of Aamaawasthaof Netra are Severe pain, redness, oedema, Foreign body sensation, pricking type pain and watering. Clinical Features of Niraanawastha of Netra-Severity of pain, itching, oedema, and watering reduces and colour of eye become clear.

Kriyakalpa Based on Ocular Pharmacology- Simple Go-ghrita or Go-ghrita/oil prepared with medicine are used formulations for Tarpana. Used preparation is in aqueous suspension form. Therefore, it will cross corneal epithelium barrier easily. Due to more tissue contact time, active components of drug will absorb more.

Mainly indicated in diseased conditions of Eyes
Used formulations for Putapaka are plant extracts after close chamber(ball wrapped by green leaves and layer of mud) combustion. Used preparation is in aqueous solution form and active component concentration is high.Tissue contact time is very less. Used after Tarpana to increase drasthibala and in mild eye affections

Decoctions of raw drugs are used formulations for Seka. Used as aqueous extract i.e. in concentrate form but used on closed eye. Medicine is absorbed through the skin of lids.Indicated in severe eye affections.

Decoctions of raw drugsare used as formulations for Ashchyothana. The active principle is aqueous extract.Tissue contact time is very less. It get diluted with tears and drained. It is used as a first line of treatment in all eye disorders.

Anjana are Liniment of drugs. Bioavailability is more due to more tissue contact time.Anjanas are mainly having lekhana properties which can gradually taper the thickness of the membrane and there by prevent the growth and reduce the size.

Pindi/Kawlika are Poultice of different Medicine. Medicine is absorbed through the indicated in abhisyandha andskin of lids.Due to heat of poultice, local temperature is increases resulting in local vasodilation. So the drainage of toxin occurs from lesion site.

oedema, itching and ocular pain.
Vidalaka are medicated paste is applied over the skin of lids.Medicine is absorbed through the skin of lids.Mechanical effect of pressure helps in reducing IOP by vaso-dilation and aqueous drainage.Indicated in early stages of eye diseases especially for curing burning, watering, swelling and redness of eye.

All efforts should be made to strengthen the eyes by resorting to Nasya, Anjana, Tarpana etc. for once the vision is lost the different kinds of things of the world will all become of one kind- that of darkness.

Conclusion

As in Ayurveda, we are applying ophthalmic restorative either within the shape of neighborhood therapy i.e. Kriyakalpa or within the form of systemic utilize i.e. verbal Chakshushyadravyas. The most point of any pharmaco therapeutics is the achievement of an successful concentration at the location of activity for a adequate period of time to inspire the reaction. In hone, helpful impact is found in all sorts of Kriyakalpa. It is up to the science to relate the perceptions with their logical clarification. Here in display audit article, it is attempted to relate the Ayurvedic visual helpful i.e. Kriyakalpaon the premise of cutting edge pharmaco- helpful. Different drugs can be chosen agreeing to the organize and sorts of the disease and can be utilized in different Kriyakalpa strategies concurring to require. Within the light of over essentials of advanced pharmacology, all the Ayurvedic visual helpful methods are significant as such.

References

- [1] Eisenberg DM, Davis RB, Ettner SL, Appel S, Wilkey S, Van Rompay M & Kessler RC, Trends in alternative medicine use in the United States, 1990-1997: results of a follow-up national survey, JAMA, 280(1998)1569-1575.
- [2] Nityananda, Traditional medicine in health care: perspective in the new millennium Proc Int Conclave Traditional Medicine, 16-17 Nov, (National Institute of Science Communication and Information Resources, New Delhi), 2006
- [3] Qazi GN, Standardization, quality control and safety of traditional medicine, Proc Int Conclave Traditional Medicine, 16-17 Nov 2006, (National Institute of Science Communication and Information Resources, New Delhi), 2006.
- [4] Anonymous, Guidelines on safety monitoring and pharmacovigilance on herbal medicine (World Health Organization Geneva), 2003.
- [5] Anonymous, Guidelines on safety monitoring and pharmacovigilance on herbal medicine (World Health Organization Geneva), 2003.
- [6] Vagbhata. Ashtanga Hridaya. Sarvanga Sundari Comm. Arunadatta & Ayurveda- Rasayanacomm. In: Hemadri D, Sadashiva SP, editors. Uttarthana 13/98. Varanasi: Chaukhamba Surbharati Prakashana; 2007
- [7] Sushruta. Sushruta Samhita Dalhana Comm. Nibandhasangraha, Gayadasacharya comm. Nyayachandrika Panjika on Nidanasthana. In: Jadavaji T, Narayana R, editors. Uttara Tantra 18/4. Varanasi: Chaukhamba Surbharati Prakashana;
- [8] Agnivesha, Charak Samhita, Rashtrita Sanskrita Sansthan, New delhi, reprint 2006; sutrasthana 13 / 14
- [9] Sharangadhara, Sharangadhara Samhita, edited by Prof. K. R. Srikanta Murthy, 4th edition 2001, published by Chaukhamba Orientalia, Madhyama Khanda 13/6 pg. 258
- [10] Bhaishajya Ratnavali, by Kavirj Ambikadata Shashtri, 15th edition, 2002, 64/6 pg. 564
- [11] Agnivesha. Charaka Samhita, Comm. Chakrapanidatta. In: Jadavaji TA, editor. Chikitsasthana. Varanasi: Chaukhamba Surbharati Prakashana; 2008. 26/231
- [12] Text book of Ophthalmology by A.K Khurana, 3rd edition, 2005

