



AKSHI TARPAN-AN UNIQUE OCULAR THERAPY IN AYURVEDA

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ABSTRACT Shalakya tantra stream of Astanga Ayurveda mainly deals with etiology, symptomatology and treatment in the form of local and systemic administration related to eyes, nose, ears and mouth etc. Kriyakalpa is the treatment method usually adopted in Netra Rogas to normalize the vitiated Doshas. Out of these, Tarpana (ocular therapy) is one of the local therapeutic procedure where exact amount, dosage, schedule, frequency which if promptly used, is mentioned by Acharyas. Akshi Tarpana splits into two words "Akshi" means eye and "Tarpana" means nourishment. Tarpana is a Snigdha Kriya indicated in Vata Dusta and pitta dusta netra vikara [1]. It is commonly indicated in macular degeneration, computer eye strain, degenerative conditions, myasthenia gravis, drooping of eyelid. In healthy people Tarpana is carried out to protect the eyes from degeneration due to ageing process and to improve the eye sight. Thus Akshi Tarpana is an excellent soothing, relaxing eye treatment to rejuvenate eyes and surrounding tissues. The aim of this review article is to study the concept of Akshi Tarpana, their indication, contraindication, modality of procedure and its efficacy.

KEYWORDS : Shalakya tantra, kriyakalpa, netra rogas, nerta tarpana.

INTRODUCTION

Netra (Eye) "*Sarvendriyanam Nayanam Pradhanam*" is the prime sense organ among all sense organ which is considered as a source of *Pratyaksha Gyana* (direct perception). *Sushruta* has detailed nineteen chapters in *Uttaratantra* that expound the medical, surgical and preventive aspects of *Netra*.

Kriyakalpa are specifically designed, according to the stage and severity of the disease. These *Kriyakalpas* are *Akshi Tarpana*, *Putapaka*, *Seka*, *Aschyotana*, *Anjana*, *Pindi* and *Bidalaka*. [2]

Among all the *Kriyakalpas*, *Akshi tarpana* is the foremost procedure mentioned in the management of eye disorders. *Netra tarpana* is a type of *Bahya Snehana* or *Brimhana chikitsa* and acts as both preventive and curative therapy.

Tarpana- *Tarpana* is usually practiced *Kriya* in *Netra Chikitsa* which is *Brimhana* (nourishing) in nature [3]. It is also commonly known as *Netra Basti* or *Akshitarpana*. *Netra* refers to eyes and *Basti* stands for means to hold (compartment which holds) or retaining something inside, in this case mainly medicated ghee. The literary meaning of *Tarpana* is to nourish the eye. *Netra Tarpana* is a procedure in which comfortably warm medicated ghee is kept over the eyes for a certain period of time with the help of a specially formed frame ring prepared from black gram powder that help to retain medicated ghee for certain duration. *Tarpana* is useful both in healthy as well as diseased persons. In healthy persons it is carried out to protect the eyes from degeneration due to aging process and to improve the eyesight. It is commonly indicated in macular degeneration, computer eye strain, degenerative conditions, 7th -6th nerve palsies, myasthenia gravis, drooping of eyelid.

Indications for Tarpana Karma- When a patient perceives *Tama* (darkness) in front of eyes, *Netra Vishushkata Daruna Netra Sheerna* Pakshma Kathina Vartma Stabdha Netrata Avila Netrata Deviated eyeball or squint Vata Pitta predominant diseases. Acharya Vagbhata has further indicated Tarpana Karma in some other ocular conditions. They are as follows. Kricchronmilana Siraharsha Sirotpata Tama Arjuna Syanda Adhimantha Anyatovat Vataparyaya Avrana Shukra Naktandhya.[4]

Contraindications for Tarpana Karma- On a cloudy day Extreme hot or cold seasons In conditions of worries and anxiety In conditions of tiredness of eyes In ocular complications In the condition of acute pain Inflammation.[5]

Tarpana Dravya- Ghrita is commonly used as *Sneha* during *Tarpana Karma* because it is *Yogavahi* and it gets enriched with the properties of the drug used during *Sanskara* and at the same time it retains its own properties. *Ghrita* is having *Madhura rasa* and *Madhura vipaka*, *Sheeta virya* in nature and it possesses properties like *Tridoshaghna*, *Ojovardhaka* and *Rasayan*.

PROCEDURE:

Purvakarma[6]

1. Preparation of the Patient-

Kaya Shuddhi: includes- *Vamana* and *Virechana*

Shiro-Shuddhi: i.e., *Nasya* or *Shiro-virechana*

Sthanika Abhyanga and *Mridu Swedana* is done. (*Tarpana* should be performed after the meal, taken earlier and is fully digested).

2. *Sambhara Sangraha*: *Ghrita*, flour of black gram for the construction of *Netra Tarpana socket* (ring/ cabinet), water, stove, bowls, vessels, spoons, sterile cloth/cotton.

Pradhana Karma [7] after explaining the method of treatment to the patient in detail, patient should be taken to a place devoid of heavy breeze or air to conduct *Akshi Tarpana* treatment.

Tarpana treatment shall be done in '*Sadharana Kala*' i.e. in a season which is neither too hot nor too cold and when there is no rain or sky enveloped with clouds.

Then patient is made to sleep in supine position with support at the neck region with face upwards.

Construction of *Akshi Tarpana ring/chamber* around the eye: The rings of flour which were prepared in the *Purvakarma* are kept over the eye sockets, (one on each eye). The junctions of the rings with eye sockets are sealed with wet flour so that the *tarpana dravya* doesn't leak or escape during the process of the treatment.

After the construction of *Akshi Tarpana pali*, medicated *Ghrita* which is liquefied by hot water should be poured in to the well up to the level of tips of eye lashes. The patient should then be asked to blink slowly which allows the medicine to reach the target tissue. The medicine should be made to retain on the eyes for a specific time period, depending on the *Dosha*, *Roga avastha* and *Sthana* of the *Netra vikara*.

Sneha dharan kala [8]-

Doshabheda	Sushrut	Ashtang Hruday	Sharangdhar	Bhavprakash
Vataprakop	1000	1000	1000	1000
Pittaprakop	800	600	-	600
Kaphaprakop	600	500	500	500
Swastha	500	500	500	500

Sneha dharan kala according to adhistan of roga-

Adhistan	Sushrut samhita	Ashtang hruday	Sharangdhar	Bhavprakash
Sandhi	300	300	500	500
Vartma	100	100	100	100
Shukla	500	500	600	--
Krishna	700	700	700	700
Drushti	800/1000	800	800	800
Sarvagata	1000	1000	1000	1000

Pashchata Karma- The Kapha which has already been stimulated by the potency of Ghrita should be eliminated by Shirovirechana (Nasya) and Dhoompana (Fumigation) with the Kapha mitigating property of drugs[9]. Then the patient is advised to avoid direct exposure of excessive heat, cold, wind, lustrous and shiny things[10].

Course of Procedure-

Acharya Susruta without clarifying the condition of eye, simply asks to perform the procedure for one day, three days and five days or till the proper satiating feature are attained. Gayadasa has given according to Dosha involvement while Jejjata has quoted according to the mild, moderate and severely aggravated Dosha for one, three and five days respectively. while, Videha says that the procedure should be carried out daily in Vatika diseases, alternatively in Pittaja and Raktaja diseases, with the interruption of two days in healthy eye and Sannipataja diseases and with the gap of three days in Kapha diseases. Vagbhata agreed with Videha except for Kapha diseases where he advices an interruption of two days.[11]

Samyaka Tarpita Lakshana- Sukhaswapna (good / sound sleep), Avbodhatva (Blissful Awakening) , Vaishadhya (Clearness of eyes) , Nivriti (feels comforts) , Vyadhividhvasna (cures the disease) , Kriya Laghvana (feels easy in eye movement). [12]

PROBABLE MODE OF ACTION OF NETRA TARPANA KARMA

- First of all Sthanika mrudu snehana & swedana was given (this could help in dilation of conjunctival sac & limbal vessels which in turn helps in better absorption).
- Ghrita is having Madhura Rasa and Madhura Vipaka, Sheeta Virya which is useful in mitigating Vata and Pittaja Vikara.
- Ghrita contains vitamin A, D, E, K and carotene in it. Vitamin A and E are antioxidants and vitamin A also preserves the outer lining of the eyeball moist.
- Digestion, absorption and delivery to a target organ system are crucial in obtaining the maximum benefit from any formulation. This is facilitated by Ghrita, since active ingredients of drugs are mixed with Ghrita and they are easily absorbed. Hence it nourishes the ocular structures.
- In cornea, the epithelium and endothelium are lipid permeable i.e., lipophilic whereas stromal layer is hydrophilic. Hence the lipophilic and hydrophilic drugs are effectively delivered to cornea, whereas the drug permeability across the sclera depends upon the molecular size and weight of the drug.
- Duration of tarpana upto 10 mints approx. Ghrita is highly viscous the contact time is increased & this helps penetrating of drug through cornea.
- The active principle of medicated ghrita reaches central nervous system & nourishes the structures around nerves supplying of eyes. There by strengthening the ocular muscles. This might have helped in some asthenopic symptoms (eye strain, headache, watering etc.). The pressure excreted by ghrita its surface tension & contact time with cornea would have helped in flattening the sleep corneal surface to some extent. There by reducing the cylindrical power.
- The Ghrita with decoction of medicines has the quality of trespassing into minute channels of the body, hence when applied in the eyes; it enters deeper layers of Dathus and cleanses every minute part. The lipophilic action of Ghrita facilitates the transportation of the drug to the target organ and finally reaches the cell because the cell membrane also contains lipids.

CONCLUSIONS:

After reviewing various researches and available scientific data regarding Tarpana it can be concluded that, Tarpana is a superior therapy than merely using eye drops. Tarpana acts on the principle of Bahya Snehana. It can successfully cross the defensive Barriers present in eye for absorption and nourish the ocular and periocular Structures & also strengthens the sphincters. Administration of Tarpana in the Eye, Drug absorb through various layers of the eye and drugs spread in to the deeper tissues through Rupavaha Siras. Ghrita is having Rasayana, Balya & Chakshushya properties. By the Activation of Alochaka Pitta it induces of Chakshu vaisheshika & Buddhi vaisheshika Alochaka Pitta. Chakshu vaisheshika Alochaka Pitta Increased power of DrishtiNadi. Buddhi vaisheshika Alochaka Pitta Activate of Visual centre in Brain (Optic nerve). So improve Visual status & Tarpan is the best treatment modality for eye disease. It maintains the health of eye & cures the eye diseases. Akshi Tarpana

treatment rejuvenates and relieves the ocular stress and helps the eyes to function more efficiently and effortlessly.

REFERENCES:

- [1] Ambikadatta Shasrti, Sushruta samhita, Chaukhamba Sanskrit Sansthan, Uttartantra, 18/8:94
- [2] Parashuram Shashtri Vidyasagar, Sharangdhara. Sharangdhara Samhita. Dipika comm. Adhamalla and Gudharth- Dipika comm. Kashiram., Editors. Uttarkhanda 13/1. Varanasi: Chaukhamba Orientelia; 2008.
- [3] Surendran e. Panchkama, a guide to treatment procedure in ayurveda, edition, kottakalm, vaidhyaratnam p.s. varier ayurveda college, 2006;1:104.
- [4] Astanghrdayam of Shrimadvagbhata Edited with Nirmalahindi commentary by Dr.BrahmanandTripathi, chap24,pp-269, ChaukhambaPrakashan.
- [5] ShushrutSamhita by Sushuracharyawith Nibandhasangraha commentary of shriDalhana, Edited by YadavjiTrikamjiAcharya, Uttartantra, chap-18, pp-634, ChaukhambaPrakashan, Varanasi.
- [6] Sushruta Samhita, edited with Ayurveda Tattva Sandipika Hindi commentary part 2 by Dr. Kaviraja Shastri Ambika Dutta, Chaukhamba Prakashan, Varanasi, Sushruta Uttartantra 18/05.
- [7] Vagbhata. Sutrasthana. Sarvangasunder commentary of Arunadatta and Ayurveda rasayan of Hemadri. Ashtangahridaya, reprint ed. Varanasi: Chaukhambabha sanskrita samsthana; 2010. Ch24/verse 46
- [8] Kunte A.M. Vagbhata. Sutrasthana. Sarvanga sundar commentary of Arunadatta and Ayurveda rasayan of Hemadri. Ashtangahridaya, reprint ed. Varanasi: Chaukhambabha sanskrita samsthana; 2010. 24:308
- [9] Kunte A.M. Vagbhata Sutrasthana. Sarvangasunder commentary of Arunadatta and Ayurveda rasayan of Hemadri. Ashtangahridaya, reprint ed. Varanasi: Chaukhambabha sanskrita samsthana; 2010. Ch24/verse 9.
- [10] Kaviraja Ambikadutta Sashtri, Sushruta Samhita of Maharishi Sushruta, edited with Ayurveda TatvaSandipika, Hindi commentary, Vol. 2, Edition: reprint 2012, by Chaukhamba Sanskrit Sansthan, Sushruta Uttartantra 18/4-7 pg 93.
- [11] Sushruta Samhita, Nibandha Sangraha commentary by Dalhana edited by Trikamji Yadavji, Chaukhambha Surabharati Prakashan, Varanasi, Sushruta Uttartantra edition:2008. pg.529.
- [12] Sushruta Samhita, edited with Ayurveda Tattva Sandipika Hindi commentary part 2 by Dr. Kaviraja Shastri Ambika Dutta, Chaukhamba Prakashan, Varanasi, Sushruta Uttartantra 18/13.