NETRATARPANA: ROLE IN SIMPLE MYOPIA – A REVIEW ARTICLE

Bamola Poonam¹, Anjali

M.S Shalakya Tantra, Lecturer, G.N.A.M.C And R.I, Gopalpur, Ludhiana Punjab-141118, India, P.G Scholar Department of Shalakya Tantra, Rishikul College, Haridwar, Uttarkhand, India

Email: poonam.bamola@gmail.com

ABSTRACT

Eyes are the most precious gift of the God to the living beings and a good vision is prerequisite for an active and healthy life. Uncorrected refractive errors are considered as major cause of impaired vision and significant cause of blindness. Myopia has its significance as a global public health concern for the very reason W.H.O prioritizes its treatment in order to eliminate causes of avoidable blindness in Vision 2020. In spite of remarkable progress of modern ophthalmology the effective control of myopia is still a challenge. Ayurveda can be explored to find better alternative to manage this. In Ayurvedic classics, symptoms of myopia can be compared with PrathamPatalgat Timira which is one among DristigatRogas. Tarpana is the most revered Kriyakalpa procedure which gives nourishment to eyes and has curative as well as preventive effect and is extensively used in DrishtigatalRoga.

Keywords: Myopia, Tarpana, Kriyakalpa, Triphala ghrita

INTRODUCTION

Myopia a common refractive error in which the optical power of the eye is too strong for the corresponding axial length. Light rays from an object at infinity entering a non-accommodating myopic eye are converged too strongly and focus in front of the retina¹. Uncorrected myopia is the leading cause of distance vision impairment globally. Myopia is highly prevalent disease. Nearly five billion people, that is about half the world’s population, are poised to become myopic or short-sighted by the end of 2050, indicates a study according to the Indian express. Various surveys in India have found the myopia prevalence ranging from 6.9% to 19.7%²³. Due to the significance of myopia as a global public health concern, it was chosen as a priority for Vision 2020, World Health Organization's global initiative for the elimination of avoidable blindness by year 2020⁴.

Most common method of myopia correction is spectacles but correction with spectacles is only palliative, as they cannot check further progression of the condition. Moreover, it keeps varying as the condition advances and also is not cosmetically accepted. Apart from spectacles the other options are contact lenses, refractive surgeries like LASIK which is both costly and unsuitable for children's eyes. Methods for the correction of myopia are not without complications, including corneal infections due to contact lens wearing, corneal scarring and persistent corneal haze from refractive surgery. Hence, the Ayurvedic science can be explored to find a better alternative to
manage this condition. Clinical ShalakaTantra manages eye ailments via topical and systemic measures and among these, topical therapy or Kriyakalpa plays more important role. As quoted in AshtangaHridaya, sincere efforts should be made by every individual to preserve vision till the last breath of life, because for an individual who is blind, day and night are the same and this beautiful world is of no use to him even if he possesses a lot of wealth. All efforts should be made for the strength of eyes, by resorting to Nasya, Anjana, Tarpana etc. Once vision is lost the versatility of the world will all become merged to one, of unified darkness.

AIM:
To study effect of Tarpana karma in simple myopia w.r.t to pratham patalgatatimir as given in ayurvedic classical texts

OBJECTIVES:
1. Collection of various references of tarpana karma from available ayurvedic texts.
2. Enlightening the use, procedure and duration of Tarpana in ayurvedic texts.

MATERIAL AND METHODS:
All references were collected from original text of Shusruta Samhita, Ashtanga Hridayam, Sharangdhar Samhita.

KRIYAKALPA:
BastiChikitsa happens to be the Chikitsardha in KayaChikitsa, Rakthamokshana-Chikitsardhain ShalyaChikitsa, similarly Kriyakalpa form Chikitsardha in ShalakyaChikitsa. When we refer to our classics for the therapeutic measures adopted in the management of eye diseases, we find that the management includes many of the topical treatments along with systemic ones. The reason might be that the drugs administered systematically may not cross the blood aqueous, blood-vitreous and blood-retinal barriers. Kriyakalpa is main therapeutic process for netra roga.

Kriya means to do, to perform (or) to practice; the word Kriya refers here to therapeutic procedures, which cures the disease without causing any adverse effects. Kalpa indicates the specific formulations adopted for the therapeutic procedures. Hence, the word Kriyakalpa means to perform proper treatment. Kriyakalpas are meant to alleviate the SthaniKa Khavaigunya resulted out of vitiated Doshas & their impact on Netra-Avayavas. KriyaKalpa’s can also be used as Swasthya Sanrakshaka Prayoga to maintain functional integrity of the sense organs & overcome age related disorders. KriyaKalpas includes Seka, Aschyothana, Tarpana, Putapaka, Anjana, Vidalaka, and Pindi. Among all Kriyakalpas, Netra Tarpana is the foremost procedure for eye disorders.

NETRATARPANA
NetraTarpana is one of the specialized treatments for various eye disorders. The Netra Tarpana acts as both preventive and curative therapy for maintaining normal healthy condition of eye.

INDICATION:
-If patient seeing darkness in front of eyes
-Dry eyes
-Hard lids with falling eyelashes
-Dirty eyes
-Squinting eyes
-Eyes badly affected with disease
-Vata –Pitta predominant diseases

CONTRAINDICATIONS:
-On a cloudy (or) very hot (or) cold days.
-In persons suffering from anxiety, tiredness, giddiness.
-In the condition of acute pain, inflammation, redness.
-In the eyes where complications have not abated.

PROCEDURE
Tarpana should be administered only after Samshodhana of Shira and Kaya. Tarpana can be done either in early morning or evening only after
the digestion of any food taken previously. The patient is asked to lie down on his back, in a chamber free from direct sun rays, wind and dust, and is given mild fomentation with a cotton soaked in lukewarm water, then the eyes are encircled with firm, compact wall made up of paste of powdered Masha pulse (black gram). The height of this wall should be 2 Angula. The patient is asked to close the eyes and over the closed eyes, liquefied Ghritamanda is poured very slowly till the entire eyelashes are under the liquefied Ghrita. Patient is instructed to close and open his/her eyes (Unmesha & Nimesha). After retaining for the stipulated time, the liquid is drained out through the hole made near the outer canthus and the eye is irrigated by lukewarm water fomentation. After finishing the main procedure of Akshitarpana, Dhoompana i.e. medicated smoke is given to the patient. Then patient is advised to avoid direct exposure to excessive cold, heat, wind, lustrous & shiny things.

MODIFICATION IN PROCEDURE OF TARPANA:
Nowadays, time is money and patients don’t have so much time to undergo this traditional procedure. So, a new technique was developed. A swimming goggle is taken and its upper glasses are removed for pouring medicine. There is no chance of leakage of the medicine in this method. This gives good results but is somewhat uncomfortable to the patient.

COURSE OF PROCEDURE:
Sushruta, without clarifying the condition of the eye, simply asks to perform the procedure for one day, three days and five days or till the proper satiating features are attained. According to Acharya Jejjata for Vataja diseases Tarpana has to be done for 1 day, for Pittaja diseases Tarpana has to be done for 3 days, and for Kaphaja diseases Tarpana has to be done for 5 days. According to Acharya Videha, Tarpana can be carried out daily or Niranathara or alternate day or with two days break or three days break depending on Dosha & Teevratha of Vyadhis well as Swasthya. According to Acharya Vagbhatta, Tarpana should be done daily in vitiation of Vata, on alternate days in Pitta, with an interval of two days in Kapha and in Swastha (healthy person) or till the eyes become fully satiated.

PERIOD OF RETENTION:
Tarpana should be retained for a period, which is taken for counting the number of syllables mentioned according to the healthiness or unhealthiness of the eye. It can be summarized as below-

<table>
<thead>
<tr>
<th>Condition of eye</th>
<th>Shusrutasamhita</th>
<th>Ashtangasamgraha</th>
<th>Astangahridya</th>
<th>Bhaavprakash</th>
<th>Sharangdharasamhita</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthy</td>
<td>500</td>
<td>500</td>
<td>500</td>
<td>500</td>
<td>500</td>
</tr>
<tr>
<td>Kapha predominant</td>
<td>600</td>
<td>500</td>
<td>500</td>
<td>500</td>
<td>500</td>
</tr>
<tr>
<td>Pitta predominant</td>
<td>800</td>
<td>600</td>
<td>600</td>
<td>-</td>
<td>600</td>
</tr>
<tr>
<td>Vata predominant</td>
<td>1000</td>
<td>1000</td>
<td>1000</td>
<td>1000</td>
<td>1000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Site</th>
<th>Shusrutasamhita</th>
<th>Ashtangasamgraha</th>
<th>Astangahridya</th>
<th>Bhaavprakash</th>
<th>Sharangdharasamhita</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sandhigata</td>
<td>300</td>
<td>300</td>
<td>300</td>
<td>500</td>
<td>500</td>
</tr>
<tr>
<td>Vartmagata</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Shuklagata</td>
<td>500</td>
<td>500</td>
<td>500</td>
<td>-</td>
<td>600</td>
</tr>
<tr>
<td>Krishnagata</td>
<td>700</td>
<td>700</td>
<td>700</td>
<td>700</td>
<td>700</td>
</tr>
<tr>
<td>Drishtigata</td>
<td>800</td>
<td>800</td>
<td>800</td>
<td>800</td>
<td>800</td>
</tr>
<tr>
<td>Adhimantha</td>
<td>1000</td>
<td>1000</td>
<td>1000</td>
<td>1000</td>
<td>1000</td>
</tr>
</tbody>
</table>
SIGNs AND SYMPTOMS OF PROPER TARPANA\textsuperscript{12}:
Sound sleep, Blissful awakening, cessation of secretion, clearness of vision, discernment of individual color’s, agreeable sensation, lightness of the eye and proper functioning of eye, ability of the eye to tolerate sunlight.

COMPLICATIONS OF EXCESSIVE TARPANA\textsuperscript{13}:
Features of heaviness, indistinct vision, excessive oiliness, lacrimation, itching, stickiness and aggravation of Doshas especially KaphaDosha results from excessive Tarpana.

EFFECT OF INADEQUATE TARPANA\textsuperscript{14}:
Dryness, indistinct vision, excessive lacrimation, intolerance to light and aggravation of the disease are the features of insufficient Tarpana.

TREATMENT OF INADEQUATE AND EXCESSIVE TARPANA\textsuperscript{15}:
In these two conditions, treatment will be applied according to predominance of Doshas with Dhoompana, Nasya, Anjana and Seka either Snigdha or Ruksha are to be used for them. Snigdha in diseases of Vata, Ruksha in Kapha and Sheeta in Pitta.

FORMULATIONS USED FOR TARPANA:
- TriphalaGhrita
- MahatriphlaGhrita
- PatoladiGhrita
- JeevantyadiGhrita

DISCUSSION
Aqueous solutions and aqueous suspensions are the two forms of drug instillation in eye. In aqueous solution form the drug is totally dissolved, so the drug is completely available for immediate action. But it gets quickly diluted by tears and drains through naso-lacrimal duct. Hence, it causes low tissue contact time. Whereas in suspension forms the drug is present as small particles suspended in aqueous medium and these do not leave the eye as early as solution. Hence it increases the tissue contact time. In cornea the epithelium and endothelium is 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.

The drugs used in Tarpana procedure is the combination of Ghrita and decoction of medicines, hence the drug can easily cross the corneal epithelium (being lipophilic) and endothelium (being hydrophilic). Also due to more contact time the active component of drug used in Tarpana will be absorbed more to cure the diseases. By virtue of Sanskraruvartana property of Ghrita, it attains the properties of ingredients without losing its own. Also other drugs used with ghrita have Chaksusya property (Jeevantyadi ghrita, Triphla ghrita, Mahatriphla girta etc). Ghrita also contains properties like Balya, Brimhana and Rasayana, so it gives strength to the overall tissues of the eyeball as well as to the nervous tissues. Moreover, the medicine preparations used in Netra Tarpana is in the form of suspension containing different particles of the drug and the particles do not leave the eye as quick as a solution. Tissue contact time and bioavailability is more and hence therapeutic concentration is achieved by Netra Tarpana. This facilitates the action of drug by two ways - one by allowing more absorption of the drug by corneal surface and secondly by exerting direct pressure upon the cornea. There may be changes in the refractive index of the cornea causing less convergence of light rays

CONCLUSION
Ayurveda has stated the importance of an eye with quote “Sarvendriyanam mayanam pradhanam” i.e. eye is the prime sense organ among the all sense organs, So sincere efforts should be made by every individual to preserve vision till the last breath of
Ayurveda, the ancient system of medicine gives valuable guide lines not only in treatment aspects but also in preventive line. NetraTarpana karma is one of the local therapeutic procedures which if properly used shows excellent response as a preventive as well as therapeutic measure in simple myopia. As existing management techniques are either cosmetically non-viable or non-affordable hence Tarpana can be explored as alternative for conventional therapies in refractive errors.

REFERENCES


Source of Support: Nil
Conflict Of Interest: None Declared

How to cite this URL: Bamola Poonam & Anjali: Netratarpana: Role In Simple Myopia – A Review Article. International Ayurvedic Medical Journal {online} 2018 {cited March, 2018} Available from: http://www.iamj.in/posts/images/upload/646_650.pdf