

OCULAR THERAPEUTICS: A REVIWE OF LITERATURE ON ROLE OF ASCHYOTANA IN NETRA ROGA

¹*Dr. Pramodkumar Bibhishan Jamadar and ²Dr. M. S. Joshi

¹M.S. Scholar (2nd year) Shalaky Tantra and ²(Asso. Prof of Shalaky Tantra)
PMT's Ayurved Mahavidyalay and Shri Sant Eknath Ayurved Rugnalaya Shevgaon Dist
Ahamadnagar 401502.

Article Received on
27 Feb. 2021,

Revised on 20 March 2021,
Accepted on 10 April 2021

DOI: 10.20959/wjpr20215-20244

*Corresponding Author

**Dr. Pramodkumar
Bibhishan Jamadar**

M.S. Scholar (2nd year)
Shalaky Tantra, PMT's
Ayurved Mahavidyalay and
Shri Sant Eknath Ayurved
Rugnalaya Shevgaon Dist
Ahamadnagar 401502.

ABSTRACT

Ayurveda is a holy science of Indian medical systems. It is *upveda* of *Atharaveda* which further divides into eight main branches. *Shalakyatantra* is one of the main branch of *Ashtang Ayurveda*. In *shalakyatantra* mainly *urdhwajartugat roga* and their management is described. Term *urdhwajatrugata* means elements above the clavicle such as eye, ear, nose, head, neck, throat etc. Among them eye is the most beautiful and important sense organ according to all acharya. Ayurvedic ophthalmology is mainly found in *sushruta uttartantra* where *kriyakalpa* is explained. This is explained in detail in *Kriyakalpa adhaya* of *sushrut uttartantra*. *Aschyotana* is one the main *kriyakalpa* described by *sushruta* in *uttartantra*. *Kriyakalpa* are nothing but ayurvedic ocular therapeutic used by our *aachrya*. *Aschyotana* relives ocular symptoms in initial phase of disease by its guna karma and

potency. In *Aschyotana anjan vidhi* acharya *vagbhata* describe *Aschyotana* as a first line of treatment in *Netrarogas*. Now a days eye drops are routinely used in ophthalmology as diagnostic and therapeutic purpose. *Aschyotana* is nothing but pouring drop.by drop drugs in eyes. *Acharya sushruta* described three types of *Aschyotana* according to *prakupit dosha*. They are namely *snehana*, *ropana*, and *lekhana* in vitiated *vata pitta* and *kapha dosha* rerespectively. *Aschyotana* acts locally and prevents symptoms like *Netra ruja* (eyeache) *Netra kandu* (itching sensation) *daah* (burning sensation) *raaga* (redness of eyes) *toda* (pricking sensation) *ashru* (epiphora) etc.

KEYWORDS: *Kriyakalpa, Aschyotana, ocular therapeutics Netraruja, Netrakandu, dash, raaga, toda, ashru.*

INTRODUCTION

Netra is noble and one of the most important sense organ among *panchadnyanendriya*. Various *acharya* mentions *partakshya pramana* as *rugna pariksha* which requires *Netra*. Life without it is just miserable. Now a days in the era of technology use of various gadgets like mobile tablet and PC's have significantly increased. Addition to this pollution in environment and change in life style badly affects health of eyes and leads to ocular problems. So *acharya sushruta* mention *Netra roga* and their management in *uttartantra* in dedicated nineteen chapters. *Kriyakalpas* are the main area of interest as it acts locally and relives symptoms. So *Netra* is one of few organ which receives special treatment in form of *kriyakalpa*. *Aschyotana* is one of the main and first choice of treatment in the management of *Netra roga*. *Aschyotana* means pouring medicated eye drop in the eyes at the distance from two *angul*. This will help to relieve ocular symptoms like pain fb sensation burning sensation itching of eyes watering and redness of eyes.

MATERIAL AND METHODS

Detail literature review was done. Data was collected from authentic text book of *Ayurveda* and some journals regarding *Aschyotana*. Exploring *Aschyotana* according ayurvedic and modern point of view using recent data.

Aschyotana

Sushruta explains five types of *kriyakalpas* namely *tarpan putpaak Aschyotana anjan* and *seka*. *Kriyakalpa* means ocular therapeutics or procedures in the management of *Netra roga*. Further *sharagandhar* added *bidalak* and *Pindika* as a *kriyakalpa*. So now considering opinion of all *acharya* we have 7 types of *kriyakalpas*. *Aschyotana* is one of the most popular and routinely used type of *kriyakalpas*.

Types of *Aschyotana*

- 1) *Snehan Aschyotana* for *vataaj Netraroga*
- 2) *Ropan Aschyotana* for *pittaj Netraroga*
- 3) *Lekhan Aschyotana* for *kaphaj Netraroga*

Doses of *Aschyotana* and form of drug

<i>Snehan Aschyotana</i>	10 drops	<i>Tikta Snigdha</i> and warm liquid
<i>Ropana Aschyotana</i>	12 drops	<i>Madhur Shita</i> and cold liquid
<i>Lekhan Aschyotana</i>	7-8 drops	<i>Tikta Ruksha</i> and lukewarm liquid

Procedures of *Aschyotana*

- Ask patient to lay down on procedure table.
- Shortly brief the procedure before starting physician should stand behind the head of patient.
- With the help of left hand of physician open the eyes of patient. Hold the medicated drops in rights hand with the help of *pichu* or *varti*.
- Just put medicated drop at *kaninika sandhi* at a height of 2 *anguli* from eyes.
- Afterward eyes should be wiped out with the help of soft cotton cloths.
- In case of vata and kapha dosha mild fomentation with the help of cloth dipped in warm water should be done while eyes of patient should be closed.

Dharan kaal* of *Aschyotana dravya

- 1) *Snehan Aschyotana* 100 *vaakmatra*
- 2) *Ropan Aschyotana* 300 *vaakmatra*
- 3) *Lekhan Aschyotana* 200 *vaakmatra*

Precautions

Aschyotana if not done properly can lead to following *upadrava*.

UPADRAVA	SYMPTOMS
medicated drop should not be too strong and hot	Because this can lead to ocular pain redness and sometimes loss of vision too.
medicated drop should not be too cold	Because this can lead to pricking sensation in eyes and restricted movement of eyelids
medicated drop should not be used in over dose	Because this can lead to dryness of eyelid and overall dryness of eyes
medicated drop should not be used in low dose	Because this can lead to aggravation of sign and symptoms of diseases.

So avoid such a complication *Aschyotana* should be done by trained physicians with authentic way.

Condition and indication in *Netra roga*

<i>Vyadhi</i>	<i>Dravya or Avashtha for Aschyotana</i>
1) <i>Puyaalas</i>	<i>Aam avshtha Aschyotana</i> should be done
2) <i>Upnaaha</i>	<i>Patolpatra Amalaki qwath</i>
3) <i>Praklinaa vartma</i>	<i>Nagarmotha, haladi, yashtimadhu, priyangu, lodhra, vaala, kamal churna</i>
4) <i>Kukunak</i>	<i>Guduchisidhha ghrita triphalasisidhha ghrita</i>
5) <i>Pashmakopa</i>	According to <i>Abhishyanda</i>
6) <i>Savrana shukra</i>	<i>Nilkamal, kakoli, draksha, yashtimadhu, vidari, ajadughdha</i>
7) <i>Avrana shukra</i>	<i>Madhuk ghrita stree stanya</i>
8) <i>Vataj abhishyanda</i>	<i>Vaala tagar manjishtha udumbar twaq anup mansa qwath</i>
9) <i>Pittaj abhishyanda</i>	<i>Yashtimadhu lodhra manuka Sharkara utpal katphal churna daruharidra raktachandan manjishtha suvarnagairik honey</i>
10) <i>Kaphaj abhishyanda</i>	<i>Ruksha qwath kantkari lodhra aragwadhmula shigru palwa rasa sunthi triphala nimba adhulasa</i>
11) <i>Amyodushit</i>	According to <i>Pittaj abhishyanda</i>
12) <i>Shushkakshipaka</i>	<i>Manjishtha yashtimadhu Krishna sariva lodhra laksha honey manuka rakt chandan karanjbij koranta pushpa</i>
13) <i>Sashopha akshipaaak</i> 14) <i>Ashopha akshipaaak</i>	<i>Darwi qwath</i>
15) <i>Pothaki</i>	<i>Aamra jambhu prawal qwath triphala honey</i>

Mode of action of *Aschyotana* according to ocular pharmacology

Tropical administration of drug involved two barriers namely static and dynamic barriers. Static barrier includes different layer or cornea sclera and retina along with blood retinal barriers. Dynamic barriers include choroidal and conjunctival blood flow with tear dilution and lymphatic drainage. Drop that installed in the form of eye drop are generally water soluble or fat soluble drugs. When they came in contact with Cornea they absorb into eyes via different corneal layers. Since cornea has five layers it has different permeability to different layer. The epithelium and endothelial layer is highly permeable to lipophilic drug while stromal layer is highly permeable to hydrophilic drugs. So for better penetration of drug it should be lipophilic as well as hydrophilic means must be amphiphilic.

The medicated *ghrita* which is generally used for *Aschyotana* is saturated with decoction of various drugs. So it is lipophilic as well as hydrophilic. In *Aschyotana* drug is repeatedly poured from height of two *angulis* hence tissue exposure and contact become more as compared to modern days eye drops. Also cold and warm nature of medicated drug helps for more penetration and gives desired effect.

IMPORTANCE

Aschyotana is one of the main *kriyakalpa* described by our *acharya*. *Aschyotana* as treatment regime which is local procedure that have utmost importance in treatment. As a sense organ eye is the only organ which required special type of local treatment as compare to systemic one. In *Netra roga* various *dosha* get deposited into various part of eyes so it require local treatment of regime rather than systemic. So considering this need of hour our *acharya* thoroughly described *Aschyotana* as well as other type of *kriyakalpa*. As *dosha dushti* takes place in *Netra* systemic medication does not relieves much pain most of the time. So local procedure like *Aschyotana* will be very useful to relive symptoms in less time.

DISCUSSION

Netra as one of the main important sense organ receives treatment in various form. As like in *Ayurveda* now a days treatment of various eye disease can broadly divided into local as well as systemic intervention. Our *acharya* mention local procedure in the form of *kriyakalpa* and systemic intervention as in oral route with the help of *chakshukshya dravya*. main aim of any treatment is to provide effective concentration of drug with time period. In *kriyakalpa* like *Aschyotana* the desired effect of drug is found which is important to elicit response in practise. *Aschyotana* is one of the most important *kriyakalpa* widely used then and now because of its excellent response. Unlike other *kriyakalpa* in *Aschyotana* duration of contact is less while the drug gets diluted with tears and can easily drained out through NLD.

CONCLUSION

The above description and discussion suggest that *Aschyotana* as a ayurvedic ocular therapeutics has utmost importance in ocular infestation. This article is the sincere effort to describe and propagate *Aschyotana* as a independent protocol in *kriyakalpa*. This article is the sincere effort to establish and corelate action of *Aschyotana* according to Ayurveda and modern ocular pharmacology of local procedure in the form of eye drops. *Aschyotana* is simple procedure that can be used for diagnostic as well as therapeutic purpose. As *Aschyotana* is described as a first line of treatment in most of the *Netra roga* which highlights its importance and uniqueness. With the help of permutation and combination various drugs in various form can be used in *netra roga* according to vitiated *dosha*. All this quality makes *Aschyotana kriyakalpa* best to serve humanity towards ocular manifestation.

REFERENCES

1. *Acharya Vagbhata Ashtang Hrudayam Sutrasthan* Chapter 1, Hindi Commentary By Dr Brahmanand Tripathi Chaukhambha Publishing House New Delhi, Reprint Edition, 2014.
2. *Drushtarth Ashtang Hrudayam Sutrasthan* Chapter 23, By Dr P.G. Athawle, *Godavari* Publisher's Nagpur Reprint Edition, 2009.
3. *Acharya Sushruta Sushruta Samhita Uttarkhand* Chapter 19, Hindi Commentary By Dr Priyavat Sharma *Chaukhambha* Publishing House New Delhi, Reprint Edition, 2014.
4. *Drushtarth Ashtang Hrudayam Sutrasthan* Chapter 23, By Dr P.G. Athawle, *Godavari* Publisher's Nagpur Reprint Edition, 2009.
5. *Acharya Sushruta Sushrut Samhita Uttartantra* Chapter 18, Hindi Commentary By Acharya Trikamji Yadavji Sharma, *Chaukhambha Surbharti Prakashan Varanasi* Reprint Edition, 2016.
6. *Acharya Sharangdhar Sharnagdhar Samhita Uttartantra* Chapter 13, Hindi Commentary By Dr. Brahmanand Tripathi *Chaukhamba Surbharti Prakashan Varanasi* Reprint Edition, 2019.
7. *Nertaroga Vigyan* By Dr Narayan J Vidhwans, *Anand Publication* Reprint Edition, 2013.
8. *Nertaroga Vigyan* By Dr Narayan J Vidhwans, *Anand Publication* Reprint Edition, 2013.
9. *Nertaroga Vigyan* By Dr Narayan J Vidhwans, *Anand Publication* Reprint Edition, 2013.
10. *Acharya Sushruta Sushruta Samhita Uttartantra* Chapter 18, Hindi Commentary By Dr Pryavat Sharma, *Chaukhmbha Publication Varanasi* Reprint Edition, 2016.
11. *Yogratnakar*, Hindi Commentary By Vd Lakshmipati Shashtri, *Chaukhmbha Publication Varanasi* Reprint Edition, 2008.
12. *Shalakyatantra Part 1 (netraroga)*, By Vd Madhukar Lahankar, *Shantanu Publication* Reprint Edition Sept 2014.
13. *Nertaroga Vigyan* By Dr Narayan J Vidhwans, *Anand Publication* Reprint Edition, 2013.
14. *Ocular Therapeutics* By Dr N R Biswas, Viney Dubey, Ashok Dubey, *CBC Publisher's* Reprint Edition, Jan 2019.
15. Article from The American Association Of Pharmaceutical Scientist Journal <https://www.ncbi.nlm.nih.gov>.
16. *Nertaroga Vigyan* By Dr Narayan J Vidhwans, *Anand Publication* Reprint Edition, 2013.