

**ASCHYOTANA – A REVIEW ARTICLE****Dr. Apoorva M. N.<sup>1\*</sup> and Dr. Hamsaveni V.<sup>2</sup>**

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**ABSTRACT**

The word “*Kriya*” stands for *chikitsa* or therapeutic procedure and “*Kalpa*” stands for *vidhi* or adopting a specific formulation for a Specific therapeutic procedure. *Kriya Kalpa* includes adopting various therapeutic procedures for *Netra roga chikitsartha* like *Tarpana*, *Putapaka*, *Seka*, *Aschyotana*, *Anjana*, *Pindi*, *Bidalaka*. *Aschyotana* one among the *Netra Kriyakalpa* has a wide variety of uses and is considered as an aadya upakrama. In present era due to lifestyle modifications and occupation there are various eye diseases emerging which have to be corrected in their earliest stages by doing this Aadya Upakrama only. *Ayurveda* the science of life has satisfactory remedies for such diseases through *Kriyakalpas*. *Aschyotana* mentioned by our Acharyas plays vital role in managing eye diseases caused due to lifestyle modification and occupational changes. Here at the outset an attempt is made to throw light over the *Aschyotana* mentioned in our

classics.

**KEYWORDS:** Netra, Kriyakalpa, Aschyotana.

**INTRODUCTION**

Ayurveda aims at *Swasthasya Swastya Rakshana* and *Aturasya Vikara Prashamana*. *Kriyakalpas* mentioned in our classics comes under both which keeps eyes in healthy state and even relieves diseases. The present era of science and technology has led to the excess

usage of gadgets (computers, laptops, TV, mobiles, tablets etc.) which in turn leads to ocular infestations and even pollution in the atmosphere affects the health of eyes.<sup>[1]</sup> *Aschyotana* – The procedure where medicine is applied drop by drop in the eye is helpful in initial stages of *Netra rogas* where doshabala is less. *Swarasa, Kashaya, Ksheera, Hima, Phanta* or *Ghrita* used for *Aschyotanartha* are having more bioavailability relieving the symptoms of *Purvarupavastha*. Hence in this article the *Aschyotana kalpa* has been elaborated keeping in mind its importance in this present era.

#### Types of *Kriyakalpas* mentioned in our classics.<sup>[2,3,4,5,6]</sup>

<i>Kriya kalpa</i>	<i>S.D</i>	<i>S.S</i>	<i>A. H.</i>	<i>C. S.</i>	<i>B.P</i>
<i>Aschyotana</i>	+	+	+	+	+
<i>Bidalaka</i>	+	-	—	+	+
<i>Seka</i>	+	+	+	-	+
<i>Anjana</i>	+	+	+	+	+
<i>Tarpana</i>	+	+	+	-	+
<i>Putapaka</i>	+	+	+	-	+
<i>Pindi</i>	+	-	—	-	+

#### Type of *Aschyotana* according to different *Acharyas*.<sup>[7,8,9,10,11]</sup>

TYPES / AUTHORS	<i>S.S</i>	<i>S.D</i>	<i>M.N</i>	<i>B.P</i>	<i>Y.R</i>
<i>Lekhana</i>	+	+	-	+	+
<i>Snehana</i>	+	+	-	+	+
<i>Ropana</i>	+	+	-	+	+

#### Type of *Aschyotana* and its *Matra*.<sup>[12]</sup>

Type of <i>Aschyotana</i>	<i>Matra</i>
<i>Lekhana</i>	Eight drops
<i>Snehana</i>	Ten drops
<i>Ropana</i>	Twelve drops

*Aschyotana Vidhi*: It can be explained under *Trividha karmas*.

#### *Poorva Karma*

- Patient should be informed about procedure.
- Patient should be comfortably lying down in supine position, in *kriyakalpa* theatre.

#### *Pradhana karma*

- The eye is opened by stretching and pressing *Apanga pradesha* by left hand.
- *Aschyotana Dravya* is taken in a dropper, small bowl holding in the right hand is instilled in the eye near *Kaninika sandhi* from a height of 2 *angulas*.

***Paschat karma***

- The fluid flowing out of the eye should be wiped out with a piece of cotton and *mrudhu sweda* was given by a *pichu* (cotton swab) dipped in *sukoshna jala*.

**Indications<sup>[13]</sup>**

It is advised in the early stage (*Purvarupa*) of all the eye diseases. *Abhishyanda* is the initial pathological change in the development of eye diseases and *pitta* is the initiating factor. Hence *Aschyotana* can be applied effectively in the diseases of *pitta* vitiation. It is also beneficial in the following conditions,

1. *Ruk, Toda*- Painful conditions.
2. *Kandu*- Itching.
3. *Gharsha*- Foreign body sensation.
4. *Ashru*- Lacrimation.
5. *Daha*- Burning.
6. *Raga*- Redness.
7. *Paka*- Inflammation.
8. *Sopha*- Oedema.

***Samyak Yoga of Aschyotana<sup>[14]</sup>***

*Netravimalya, Vedana upashamana, Vyadhi nivrutti, Netra laghuta.*

***Heena Yoga of Aschyotana<sup>[15]</sup>***

*Avila netrata, Gourava, Roga vriddi.*

***Atiyoga of Aschyotana<sup>[16]</sup>***

*Netra raga, Dosha vriddi and Netra srava.*

**Complications<sup>[17]</sup>**

1. If the medicine has *Tikshna* or *Ushna* properties, there is a risk of burning, redness, and vision loss.
2. If the medicines are very cold, they may produce immobility of eye, excessive tears, foreign body sensation and pricking pain.
3. If the quantity of medicine is excessive, it can produce a strange feeling in the eyelids, complete closure of eye lids, involuntary lid movements, foreign body sensation and inability to open lids and with stand blowing wind.

4. If the quantity of medicine is insufficient, the disease will not respond to the treatment.
5. If the medicines are not wiped properly, it may induce discomforts like tears, foreign body sensation and pain.

### ***Aschyotana Yogas mentioned for Netra rogas***<sup>[18]</sup>

*Charaka Samhita* has mentioned following *yogas* for *Aschyotana* on the basis of *dosha dushti*.

1. *Vataja Netra Roga* – *Erandamula, Jayanthi, Bruhati, Madhushigru* and *Bilvadi panchamula* are boiled in water and used as *Aschyotana*.
2. *Pittaja Netra Roga* – *Pritvika, Darvi, Manjishta, Laksha* and *Madhuka* are boiled in water along with sugar and used as *Aschyotana*.
3. *Kaphaja Netra Roga* – *Shunti, Triphala, Musta, Nimba* and *Vasa* are boiled in water and used as *Aschyotana*.

### **Eye Drops**

Eye drops are the saline containing drops used as an ocular route to administer.<sup>[19]</sup> The Absorption, Distribution, Metabolism and Excretion of drug is mainly influenced by following factors.<sup>[20]</sup>

- Drug concentration and Solubility - Higher the concentration the better the penetration.
- Viscosity- Addition of methylcellulose and polyvinyl alcohol increases drug penetration by increasing the contact time with the cornea and altering corneal epithelium.
- Lipid Solubility- Because of the lipid rich environment of the epithelial cell membranes, the higher lipid solubility the more the penetration.
- Surfactants- The preservatives used in ocular preparations alter cell membrane in the cornea and increase drug permeability.
- PH- The normal tear pH is 7.4 and if the drug pH is much different, this will cause reflex tearing.
- Drug Tonicity- When an alkaloid drug is put in relatively alkaloid medium, the proportion of the uncharged form will increase, thus more penetration.
- Molecular weight and size

### **Probable mode of Action of *Aschyotana***

In *Aschyotana* medicine is applied in the *Kaninika sandhi*, which is highly vascularized area via which medicine is absorbed through the vessels and via circulatory system reaches the

vessels of the head region.<sup>[21]</sup> The medicine instilled in the form of *Swarasa*, *Kashaya*, *Hima*, *Phanta* (water-soluble) and *Ksheera*, *Ghrita* (fat-soluble) comes in contact with the conjunctiva and the cornea. As different layers of the conjunctiva and cornea has different permeability property, medicine is absorbed based on hydrophilic and lipophilic properties. In cornea, the epithelial layer is permeable for Lipid- soluble drugs and the stromal layer is permeable to water-soluble drugs.<sup>[22]</sup> *Aschyotana dravyas* possess hydrophilic property, hydrophobic property and both depending upon the dravyas used. Thus, the dravya gets absorbed by the layers of the conjunctiva and cornea and the excess of the medicine is diluted with the tears and passed into the NLD.<sup>[23]</sup> Here the tissue contact time and exposure to ocular surface of medicine is quite more and even the mode of application, cold and warm helps in obtaining the desired effects.

## DISCUSSION

*Acharya Sushruta* has dedicated nineteen chapters in *Uttaratantra* for *Netra roga* and their management.<sup>[24]</sup> *Kriyakalpas* mentioned are the centre of attraction for ocular therapies in *Ayurveda* because of their outstanding effects. *Aschyotana* acts in both preventive and curative aspects which can be easily employed. *Dravyas* are used judiciously in *Aschyotana* based on dosha involved acts accordingly helps in the *samprapti vighatana* thus relieving the disease.

## CONCLUSION

'Right to sight' is a human right and every individual should aim at maintaining their eye sight in a healthy way. *Ayurveda* in turn helps to maintain the same through various ocular therapeutics mentioned not only in diseased condition but also in *swastha*, where *Aschyotana* is one such modality which can be implemented in this time constraint Urbanized era. As *Kriyakalpas* have several benefits than the oral medications which directly targets the affected tissue and gives quick results<sup>[25]</sup>, this can be effectively employed in the *Amavastha* of *Netra roga*.

## REFERENCES

1. By Rohith P. Chilbule, Kiran B Patil and Chandrashekar Mule, Role of Aschyotana in Ocular Infestation -A Review, International journal of Research in Indian Medicine, September 2017; 1(4).
2. Sharangadhara, Sharangadhara Samhita translated by Prof. K R Srikantha Murty, Reprint 2012, Published by Chaukamba Orientalia, Varanasi.

3. Susruta, Susruta samhitha with Nibandha samgraha commentary by Dalhanaacharya, Chaukambha surabharati prakashan, Varanasi, Reprint 2012, Uttara Stana.
4. Dr. Anna moreshawar and Krishna ramachandra, Ashtanga Hridaya with Sarvangasundara commentary of Arunadatta and Ayurvedarasayana of Hemadri. 9<sup>th</sup> edition. Varanasi (India): Chaukamba Orientalia; Uttara Stana.
5. Agnivesha, Charaka samhitha- Chakrapanitika- Ayurveda dipikavyakhya, Edition 2006. New delhi. Chaukhambha publications. 2006,
6. Pandit Sri Brahma Sankara Misra commentary, Bhava Prakasha of Sri Bhamishra, part-2, Chaukhambha Sanskrit Bhawan Edition Reprint 2015,
7. Susruta, Susruta samhitha with Nibandha samgraha commentary by Dalhanaacharya, Chaukambha surabharati prakashan, Varanasi, Reprint 2012, Uttara Stana.
8. Sharangadhara, Sharangadhara Samhita translated by Prof. K R Srikantha Murty, Reprint 2012, Published by Chaukamba Orientalia, Varanasi.
9. Dr. Brahmananda Tripathi, Madava nidhana of Sri Madavakarawith madhukosha commentary by Vijayraksita & Srikanthadatta, Volume-2, Chaukhambha Surbharati Prakashan, Varanasi, Edition Reprint 2002,
10. Pandit Sri Brahma Sankara Misra commentary, Bhava Prakasha of Sri Bhamishra, part-2, Chaukhambha Sanskrit Bhawan Edition Reprint 2015,
11. Vaidya Lakshmipati Sastri edited by B.B. Sastri of Yoga ratnakara with Vidyotini, hindi commentary, Reprint 2015, Chaukhambha Prakashan, Uttara Stana, Netrarogadhikara.
12. Susruta, Susruta samhitha with Nibandha samgraha commentary by Dalhanaacharya, Chaukambha surabharati prakashan, Varanasi, Reprint 2012, Uttara Stana.
13. By Dr. Uday Shankar, A text book of Shalakyta tantra, Volume 1, Reprint 2015, Published by Chaukamba Vishwabharathi, Varanasi.
14. Sri Indradeva Tripathi, Gadanigraha of Sri Vaidya Sodhala, Edited by Sri Gangasahaya Pandeya, Part-3, edition reprint 2011, Chaukhambha Publications, Netrarogadhikara.
15. Sri Indradeva Tripathi, Gadanigraha of Sri Vaidya Sodhala, Edited by Sri Gangasahaya Pandeya, Part-3, edition reprint 2011, Chaukhambha Publications, Netrarogadhikara.
16. Sri Indradeva Tripathi, Gadanigraha of Sri Vaidya Sodhala, Edited by Sri Gangasahaya Pandeya, Part-3, edition reprint 2011, Chaukhambha Publications, Netrarogadhikara.
17. By Dr. Uday Shankar, A text book of Shalakyta tantra, Volume 1, Reprint 2015, Published by Chaukamba Vishwabharathi, Varanasi.
18. By Dr. Uday Shankar, A text book of Shalakyta tantra, Volume 1, Reprint 2015, Published by Chaukamba Vishwabharathi, Varanasi.

19. [https://en.wikipedia.org/wiki/Eye\\_drop](https://en.wikipedia.org/wiki/Eye_drop).
20. <https://gmch.gov.in/e-study/e%20lectures/Ophthalmology/Oc%20Pharmacology.pdf>
21. By Dr. P K Shantakumari, A text book of Ophthalmology in Ayurveda, 2002 edition, Published by Dr. P K Shantakumari, Thiruvananthapuram, Kerala.
22. By Rohith P. Chilbule, Kiran B Patil and Chandrashekar Mule, Role of Aschyotana in Ocular Infestation -A Review, International journal of Research in Indian Medicine, September 2017; 1(4).
23. By Rohith P. Chilbule, Kiran B Patil and Chandrashekar Mule, Role of Aschyotana in Ocular Infestation -A Review, International journal of Research in Indian Medicine, September 2017; 1(40).
24. Susruta, Susruta samhitha with Nibandha samgraha commentary by Dalhanaacharya, Chaukambha surabharati prakashan, Varanasi, Reprint 2012, Uttara Stana.
25. By Darshana Dhotre, Mamatha K V, Sujathamma K 'Seka -A Curtain Raiser to ocular therapy in the management of inflammatory diseases of eye' International journal of Ayurveda and Pharma research, September 2016; 4(9).