

A REVIEW OF ASHRU AND ASHRUMARGA : AYURVEDA AND CLINICAL ASPECT

Dr. Archana Arunbhai Patel

Associate Professor, Department of Rachana Sharir

S S Agrawal Institute of Ayurveda, Navsari

Email Id: archanapatela91@gmail.com, Page. No. 17-24

Abstract

Ayurveda has no bounds. It is a science which is a great collection of principles and experiences. *Panch Jnanedriyas* are included in 16 *Vikara* which are crucial and perform the function of imparting sense of hearing, touch, vision, taste and olfaction. Our eyes are not only articulate organs of sight; they are also emotionally expressive organ of crying. The *Ashru* or the tears are part of a separate system called the lacrimal apparatus and this apparatus is situated close to the eyeball. Lacrimal system consists of mainly the lacrimal gland and the lacrimal drainage pathway. A humble effort is made for better understanding *Ashru marga* and *Ashru marga* disease correlation.

Keywords: *Vikara, Ashru, Ashru marga.*

Introduction

Ayurveda, the ancient Indian system of medicine, is a treasure trove of principles and practices that bridge physical, emotional, and spiritual health. Its holistic approach emphasizes a deep understanding of human anatomy and its interaction with nature,

encapsulating both the physical and emotional dimensions of well-being. Among its many contributions, the concept of *Ashru Marga* (lacrimal apparatus) reflects the intricate understanding of the physiology and pathology of tears (*Ashru*).

In Ayurvedic texts, the *Ashru Marga* is described not only as a functional part of the visual system but also as a means of emotional expression. Tears, unique to humans in their role of conveying joy and sorrow, are produced by the lacrimal glands and transported through pathways known as *Ashru Marga*. The *Rigveda*, one of the foundational texts of Indian philosophy, mentions *Ashru* in various contexts, signifying its emotional and spiritual significance.

Classical Ayurvedic texts such as the *Sushruta Samhita* and *Ashtanga Hridaya* provide detailed descriptions of the anatomical and pathological aspects of the lacrimal system. Acharya *Sushruta* identifies the vitiation of doshas as the root cause of disorders in *Ashru Marga*. For instance, conditions like *Netranadi* (lacrimal fistula) and *Jalasrava* (epiphora) are directly attributed to disturbances in

the lacrimal apparatus due to improper diet and lifestyle.

In addition to physiological aspects, Ayurveda emphasizes the importance of not suppressing tears, categorized as one of the *Adharaniya Vegas* (uncontrollable urges). Charaka Samhita warns against the suppression of emotional tears (*Ashru Vega*), as it could lead to various psychosomatic conditions. By correlating ancient Ayurvedic concepts with modern clinical observations, this review explores the historical, physiological, and pathological aspects of *Ashru Marga*. The aim is to provide a comprehensive understanding of its relevance to both traditional and contemporary medicine.

Literary Review

1. REVIEW OF ASHRU MARGA AND ASHRU

Historical review

A) Vedic kala:

Rigveda: Various Mantra found related with *Ashru* in *Rigveda*.¹

Bhagvat Geeta: In *Samkhyayoga* reference of *Ashru* found in *Bhagvat Geeta*.

Sanjay said: Seeing Arjuna overwhelmed with pity, his mind grief

Stricken, and his eyes full of tears.²

B) Upnishad kala:

Brihad Aryanka Upnishad explained the formation of different structures of eyeball to different dieties for e.g. lord Aditya is responsible for formation of

Ashrumarga & *Kaneenika*. Thus, this *Upnishad* clearly defines the importance of eyeball and its related structures.

C) Samhita kala:

ASHRU MARGA AND ASHRU IN DIFFERENT SAMHITA

The *Ashru* or the tears are part of a separate system called the lacrimal apparatus. Only humans' express emotions, both happiness and sadness, by crying. In response to parasympathetic stimulation, Excessive lacrimal fluid produces by lacrimal gland that may spill over the edges of the eyelids and even fill the nasal cavity with fluid. This is how crying produces a runny nose. Lacrimation is a protective mechanism, as the tears dilute and wash away the irritating substance.

As per *Sushruta Uttartantram* 2/5 It is said that due to *Mithya Aahar Vihar* vitiated *Doshas* reaching the junction through lacrimal duct produce painless discharges from the inner canthus, this is known as *Netranadi* (sinus).³

Madhavnidan followed same as the view *Acharya Sushruta* and quoted various references regarding *Netranadi*.

In *Ashtang Hridaya Uttartantram Acharya Vagbhata* has describe about the *Ashru*.

Vitiated Vayu, getting localized in the *Jalavahini Sira* causes excess flow of *Ashru* from the *Vartma* (lids) *shukla* (sclera) *Sandhi*, through the *kaneenika* (inner canthus). By this in eye

develops pain, redness, and swelling. This disease is called *Jalasarava*.⁴

While explaining preventive aspect the treatment of *Parvani* disease, *Acharya vagbhata* says, *Parvani* should be lifted up with *Badisha*, then it cut with *Vridhipatra* at about three fourth part from the external joint, the excision made at half the length, if do not take care during excision there will be flow of tears.⁵

Netra Vartma Sira can be correlated to lacrimal duct and puncta which are present within *Vartma* or inner surface of eyelid. *Netra kosh* can be correlate to lacrimal sac or lacrimal gland and *Netra Kosha Srotas* can be compared to canaliculi, nasolacrimal duct. After *Lekhana Anjana Dosha* are expelled through *Akshi* and *Nasa*, in *Akshi* through puncta and *Nasa* through nasolacrimal duct (which opens in *Nasa*).⁶

In *Charak Samhita* reference of *Ashru* found in *sutrasthana*.

13 *Adharaniya Vegas* are mentioned, one of the *Adharaniya Vega* is *Ashru Vega*. One should not hold the *Ashru* which can cause diseases further.⁷

In *Sharandhar Samhita* 13 types of *Udavarta* are given and causes are mentioned, one of the *Karana* is *Dharan* of *Ashru Vega* which leads to *Udavarta*.

Netra Tarpan Atiyoga leads to *Ashrutyukta Guru Snigdha Netra* and *Netra Tarpana Hinayoga* leads to *Ruksha, Avila Ashru* and *Rugna Netra*.⁸

In *Harita Samhita* description regarding *Ashru*.

In *Varjya Duta Lakshana*, If *Duta* comes with *Ashru* filled eyes, then the related patient should be avoided for the treatment⁹

In *Kashyap Samhita* description regarding *Ashru*:

When the patient watch riding on the chariot pulled by cow or horse and travelling towards east or north, crying faces, getting – up after falling, etc. dreams are fruitful (*Mangalkaraka*) to the patient.¹⁰

It is given then that in *Revati Graha, Andhaputana Chikitsa, Udavarta Hetu* and *Jataharini Akrant Shishu*, the *Rodana* (crying) is the main symptom. In *Kukunaka Roga Ashru* is one of the symptom.

Dhamani of Ashrumarga:

In *Sushruta Sharira Sthana* while explaining concept of *Dhamani* he says there are two *Ashruvahi Dhamani* which falls under *Urdhvaga Dhamni*. *Acharya Dalhana* commented that *Rodana* (crying) is the function of these *Dhamni*. Here In this context *Ashruvahi Dhamani* can be compared to lacrimal apparatus.¹¹

2. Co-relation between Ashru marga vyadhi and disease of lacrimal apparatus:

- 1) **Puyalasa (Acute dacryocystitis):**¹² It can be co - related *Puyalasa* disease with acute dacryocystitis. *Puyalasa* sign and symptoms are like acute dacryocystitis.

➤ Same description available in *MadhavNidan*.

- **Acute dacryocystitis:** Acute dacryocystitis is an acute suppurative inflammation of the lacrimal sac.

2) *Netra Srava or Netranadi:* (chronic dacryocystitis, lacrimal fistula)¹³

Netra Nadi is co-related with chronic dacryocystitis and lacrimal fistula.

- Same as described in *MadhavNidan*.

Netra srava: Vitiating *Tridoshas* are vitiating the *Ashruvaha Srotas* resulting in painless discharge (i.e. Pus, serous fluid mucous, mucous with blood) from the eye (*Kaneenika Sandhi*) is called 'Srava', but some *Acharyas* told it *Netranadi*.

It is formed by the external lining of the eye is rich in different types of glands. Since they are exposed, chance of getting more infections. As a result, inflammatory exudates are formed.

Among the six *Sandhi*, *Kaneeika Sandhi* deserve more attention in certain aspect. It is exit of the external eye. The normal lacrimation leaves the eye, through *Kaneenika Sandhi*. Any discharge of the eye is always connected with this *Sandhi*. So, the discharge can be considered as general symptoms of *Sandhi Rogas* and they are termed as - *Srava*.

Lacrimal fistula: When the lacrimal abscess is left unattended, it discharges spontaneously, leaving an external fistula below the medial palpebral ligament.

3) Kaphasrava: (mucopurulent Discharge)¹⁴ : As per *Sushruta Uttartantram* 2/5, One having white, thick, slimy and painless discharge is known as *Sleshmasrava*.

As per *Ashtang Hrudyam Uttartantram* 10/2, From *Kapha* (increased of) *Kapha* arises *Kaphasrava*, the exuding fluid will be white, slimy, and thick.

Kapha Srava can be co- related to mucopurulent discharge.

- Same as described in *Madhav Nidan*, *Ashtang Sangrah*.

4) Pitta Srava: (Hyper lacrimation)¹⁵ : As per *Sushruta uttartantram* 2/7, *Pitta srava* is that which causes yellowish, blue, hot and watery discharge from junction.

Pitta Srava can be co- related to hyper lacrimation, yellowish blue warm discharge coming through the *Sandhi Madhyat*.

- Same as described in *Madhav Nidan*.
- Glands related / vessels – lacrimal gland & accessory Lacrimal Gland, epithelial debris with exudates from peripheral blood vessels of wounded Leison.

5) Jalasrava: (Lacrimation / Epiphora)¹⁶: As per *Ashtang Hrudyam Uttartantram* 10/1, Vitiating *Vayu*, getting localized in the *Jalavahini Sira* causes excess flow of *Ashru* from the *Vartma* (lids) *Shukla* (sclera) *Sandhi*, through the *Kaneenika* (inner canthus). By this in eye develops pain, redness, and swelling. This disease is called *Jalasrava*.

- Same as described in *Ashtang samgraha*.

Jalavrata can be co- related to epiphora, a clinical sign or condition that constitutes insufficient tear film drainage from the eyes, in that tears will be drain on face instead of draining through nasolacrimal duct.

Epiphora: overflow of tears from the conjunctival sac. The condition may occur either due to excessive secretion of tears (hyper lacrimation) or may result from inadequate drainage (outflow) of normally secreted tears (epiphora).

6) Upanaha: (Lacrimal cyst)¹⁷ : As per *Sushruta Uttartantram* 2/4, A big cyst at the junction of the eye which is slightly suppurative, itching and painless is known as *Upanaha*.

Ashtang Hrudyam Uttartantram 10/3, From *Kapha*, arises a big swelling with a pointed tip, resembling the bubbles of *Kshar* with thick base, strong, smooth of the same color soft and slimy, big in size non- suppurating and having itching but no pain. This is known as *Upanaha*.

- Same as described in *MadhavNidanam, Ashtang Hrudyam, Ashtang Sangraha*.

Lacrimal cyst: It is a cystic swelling, which occurs due to retention of lacrimal secretions following blockage of the lacrimal ducts. It is relatively rare. If found in middle aged, due to retention of lacrimal secretion as a result of blockage of lacrimal duct

with progress slowly, proptosis occurs in downward and medially along with limitation of movement.

7) Shushka Akshipaka: (Dry eye syndrome)¹⁸ : As per *Sushruta Uttartantram* 6/26, If, on closing the, lids are hard and rough, on seeing the vision is blurred and on opening it is harder, the diseases is known as *Shushka Akshipaka*.

Shushka Akshipaka shows symptoms similar to dry eye syndrome with the involvement of lacriamal gland.

- Same as described in *MadhavNidanam, Ashtang Hrudyam, Ashtang Samgraha*

According to *Acharya Vagbhata*: The eye become rough, hard difficulty to opening & closing the lid.

Dry eye syndrome: The dry eye is not a disease entity, but a symptom complex occurring as sequelae to deficiency or abnormalities of the tear film.

8) Alaji: (Lacrimal abscess)¹⁹ : *Ashtang Hrudyam Uttartantram* 8/23, *Alaji* is a swelling inside the inner canthus, having pain, pricking and burning sensation.

In *Alaji* swelling seen in *Kneenika Sandhi* leading to discharge of blood and pus. This can be compared to the lacrimal abscess which occurs in lacrimal sac situated in *Kaneenika Sandhi*.

- Same as described in *Ashtang Samgraha*.
- According to *Acharya Vagbhat*: A hard red cystic swelling develops on the external eye lid near *Kaneenika sandhi*. It suppurates, discharge the blood-stained pus then gland bulges again.

Lacrimal abscess: Continued inflammation causes occlusion of the canaliculi due to oedema. The sac is filled with pus, distends and its anterior wall ruptures forming a peri cystic swelling. In this way, a large fluctuant swelling the lacrimal abscess is formed. It usually points below and to the outer side of the sac, owing to gravitation of pus and presence of medial palpebral ligament in the upper part.

9) Suktika: (Xerosis or Xerophthalmia)²⁰ : *Sushruta Uttartantram* 4/7, Blackish fleshy dots resembling oyster –shell located in the white portion is known as *shukti*.

Pitta increased produces in the sclera, small dots of black blue or yellow color; the entire sclera appearing like a mirror covered by dirt and has burning sensation and pain. This disease known as *Shuktika* is, accompanied with diarrhoea, thirst and fever.

- Same as described in *Ashtang Sangraha*.
- *Shuktika* shows symptoms similar to xerosis in which the tear film is unevenly distributed in the eye.

Xerosis: Xerosis of the conjunctiva is a symptomatic condition in which conjunctiva becomes dry and lusterless due to unstable tear film, exposing the conjunctival and corneal epithelium to evaporation.

10) Sirotkata (Eversion of puncta)²¹: *Ashtang Hrudayam Uttartantram* 10/14, The sclera is full of red lines, has burning sensation, pain, with slight or

no swelling, tears and thickening. This disease is *Sirotkata* and is caused by blood (vitiated).

Burning sensation, *Sopha*, *Ashru Updeha* (secondary growth) are the symptoms mentioned under *Sirotkata* this can be compare to punctual eversion. *Ashru Updeha* here can be co related to thickening or blockage in the lacrimal system.

Eversion of puncta: Eversion of lower punctum: It is commonly seen in old age due to laxity of the lids. It may also occur following chronic conjunctivitis, chronic blepharitis and due to any cause of ectropion.

Discussion:

The physician who has knowledge of *Shareera* and *Veda* in its entire aspect promotes happiness to the world. The derivation *Ashru* from *Sabdakalpdruma* is अश् + रुक् which mean “that which does not stay.” Meaning of tears is given in *Sabdsagar*, *Monierwilliams*, *Amarkosha*. In *Vachspatyam*, that is which spreads in eyeball. References of *Ashru* and *Ashrumarga* can be traced to *vedic* period.

Various *Mantras* related to *Netra* and *Ashru* are available in *Rigveda* and *Bhagvatgeeta*. *Brihad Aryanka Upnishada* explained the formation of different structures of eyeball to different dieties for e.g. *Lord Aditya* is responsible for formation of *Ashrumarga* & *Kaneenika*. Thus, this *Upnishad* clearly defines the importance of eyeball and its related structures.

Various *Acharya* has used different terminology for lacrimal apparatus. *Acharya Sushruta* and *Acharya Madhva* described lacrimal apparatus as *Ashrumarga*. *Ashtanga Hridayam* and *Ashtang Sangraha* quotes lacrimal apparatus as *Jalavahini*. The process of formation and flow of tears is described as *Netrasrava Samprapti* by *Acharya Videha*. He described that the tears are carried by *Sira* to various *Netra Sandhi*. These tears express mainly at *Kaneenika Sandhi*. Thus, it can say that *ashru* are in direct contact with *Pakshma-Vartmagata Sandhi*, *Vartma-Suklagata Sandhi*, *Kaneenika and Apanga Sandhi*. While describing *Puyalasa* (Dacryocystitis) *Acharya Sushruta* and *Dalhana* both have described *AshruMarga* and *NetraNadi*. It means that lacrimal apparatus was known to both *Acharyas*. The term *Ashruvahini* was also coined by *Sushruta* for the Lacrimal Apparatus. In *Sushruta Sharirasthana* while explaining concept of *Dhamani* he says there are two *Ashruvahi dhamani* which falls under *Urdhvaga Dhamani*. *Acharya Dalhana* commented that *Rodana* (crying) is the function of these *Dhamni*. Here In this context *Ashruvahi Dhamani* can be compared to lacrimal apparatus.

Conclusion:

Ashru Marga is lacrimal apparatus which is described in contemporary science. The thorough literary review of *Ayurvedic* literature revealed that components of the *Ashru Marga* has been described in dispersed manner at many areas while explaining different diseases which may develop in lacrimal

apparatus or which may involve lacrimal apparatus. Various diseases of lacrimal apparatus are mentioned in contemporary science and it is evaluated that most of the clinical condition were already described in *Ayurvedic* science. Lacrimal apparatus acts as supplementary system in functioning of the eyeball.

References:

1. Rigveda Mandal 10 |sutra 95, Dwitiya Varga -12,13, pg.468
2. Bhagvat Geeta chapter 2, verse 1
3. Sushruta, Sushruta Samhita (44), Uttartantra, Sandhigatarogavignaniyam Adhyaya, 2/5;598.
4. Vagbhata, Arunadatta, Hemadri, Astangahrdaya, Uttartantra (45), Sandhisitaasitarogavignaniya Adhyaya, 10/1;809.
5. Vagbhata, Arunadatta, Hemadri, Astangahrdaya, Uttartantra (46), Sandhisitaasitarogapratishtedham Adhyaya, 11/3;812.
6. Sushruta, Sushruta Samhita, Uttartantra, Kriyakalpam Adhyaya, 18/54, edited by Vaidya Jaadvji Trikamji Acharya and Narayan Ram Acharya Kavyatirtha, 8th edition, Chaukhamba Sanskrit Sansthan, Varanasi, 2014;637.
7. Agnivesha, Charaka, Dridhabala, Charaka Samhita, Sutra Sthana (43), Navegandharaniya Adhyaya, 7/4;498.

8. Sharangadara, Sharangadara Samhitha, Uttarakhanda (50), Netrariganashakupachara adhyaya, 13/51;431.
9. Harita, Harita Samhita, Dwitiya Sthana (51), Dutaparikshanlakshan Adhyaya, 8/4;172.
10. Vruddha Jeevikiya Tantra, Kashyapa Samhita, Indriya Sthana (54), Aushadhbhesajaindriya Adhyay, 92.
11. Sushruta, Sushruta Samhita, Shareera Sthana, Dhamanivyakaranam Adhyaya, 9/5, edited by Vaidya Jaadvji Trikamji Acharya and Narayan Ram Acharya Kavyatirtha, 8th edition, Chaukhamba Sanskrit Sansthan, Varanasi, 2014;384.
12. Dr. Adikanda Biswal, A Text Book of Shalakyia Tantra, Vol-1, Netra Roga, Netrasandhigata Roga, Chapter 5, Chaukhamba Publications, 2013;46.
13. Dr. Adikanda Biswal, A Text Book of Shalakyia Tantra, Vol-1, Netra Roga (71), Netrasandhigata Roga, Chapter 5;51.
14. Dr. Adikanda Biswal, A Text Book of Shalakyia Tantra, Vol-1, Netra Roga (71), Netrasandhigata Roga, Chapter 5;52.
15. Dr. Adikanda Biswal, A Text Book of Shalakyia Tantra, Vol-1, Netra Roga (71), Netrasandhigata Roga, Chapter 5;52.
16. Dr. Adikanda Biswal, A Text Book of Shalakyia Tantra, Vol-1, Netra Roga (71), Netrasandhigata Roga, Chapter 5;51.
17. Dr. Adikanda Biswal, A Text Book of Shalakyia Tantra, Vol-1, Netra Roga (71), Netrasandhigata Roga, Chapter 5;57.
18. Dr. Adikanda Biswal, A Text Book of Shalakyia Tantra, Vol-1, Netra Roga, Sarvagata Roga, Chapter 9, Chaukhamba Publications, 2013;182.
19. Dr. Adikanda Biswal, A Text Book of Shalakyia Tantra, Vol-1, Netra Roga, Vartmamandalagata Roga, Chapter 6, Chaukhamba Publications, 2013;100.
20. Dr. Adikanda Biswal, A Text Book of Shalakyia Tantra, Vol-1, Netra Roga, Shuklamandalagata Roga, Chapter 7, Chaukhamba Publications, 2013;118.
21. Vagbhata, Arunadatta, Hemadri, Astangahrdaya, Uttaratantira, Sandhisitaasitarogavignaniyam Adhyaya, 10/14, edited by Pt. Sadasiva Sastri, Chaukhamba Surbharati Prakashan, Varanasi, 2014;810.