



CRITICAL REVIEW OF ASHRUVAHA SROTAS IN CO-RELATION WITH LACRIMAL FUNCTIONAL UNIT

Dr. Rajesh L. Gadhiya*

*Assistant Professor, Dept. of Shalakyatantra, G. J. Patel Institute of Ayurvedic Studies & Research, New Vallabh Vidyangar, Anand, Gujarat, India.

***Corresponding Author: Dr. Rajesh L. Gadhiya**

Assistant Professor, Dept. of Shalakyatantra, G. J. Patel Institute of Ayurvedic Studies & Research, New Vallabh Vidyangar, Anand, Gujarat, India.

Article Received on 14/03/2017

Article Revised on 03/04/2017

Article Accepted on 24/04/2017

Anatomical description of Ashruvaha Srotas (Lacrimal Functional Unit)

Though separate anatomy of Lacrimal Functional Unit is not given in *Ayurvedic* classics except while Describing the *Panchabhautika* concept of eye.^[1] But scattered references is found in relation to understand the anatomy and physiology of Lacrimal apparatus. In *sushruta samhita acharya* has mentioned that *Aakash* – one of the five elements is responsible for creation of *Ashru marg*^[1] i.e. Lacrimal passage. And also while describing the *sraava rogas*,^[2] the detail pathological features indicates that our *acharyas* were well aware about the luminous structure of the Lacrimal Apparatus (Drainage part) residing beneath and medially to inner canthus of eyes. *Acharya shushruta* has mentioned two *Ashruvahi Dhamanis*^[3] which is responsible for production and nourishment of *Ashru*. *Acharya Vagbhata* has given strict attention to surgeons that not to damage the *Ashruvahini* while performing the *Arma Chhedana karma*.^[4] Thus, we can say that our *Acharyas* had deep knowledge of Lacrimal Apparatus without having any imagination technology.

Role of Tridosha in Lacrimal Functional Unit

Role of Vata

Vayu when unvitiated, holds up the systems and organs of the body. Employs ass sense organs in their activity, carries all sense objects, causes structural formation of all bodily *dhatu*s, promotes union in body.^[5]

The normal *vayu* moving about in the body performs these functions by making the gross and subtle channels.^[5] Thus, it is easier to understand that *vayu* plays an important role in embryological development of Lacrimal Function Unit.

Role of Pitta

While describing the physical qualities of *Pitta* in our classics,^[6] it is mentioned as one of the strong natured hot fluid of the body contains fatty substances and spreads eventually in and over ocular surface.

Thus, it provides smooth optical surface on cornea which is necessary for very sharp perception of light rays and objects.

It is also responsible for the local metabolism^[7] in the ocular surface, absorbs the medicines applied locally and contributes to the ocular surface defense mechanism.

Role of Kapha

Kapha due to its properties^[8] imparts cohesion of *Dhatu*s in eyeball as well as stabilizes the eyeball in the orbital cavity and protects the ocular surface by providing

proper lubrication. (*Udakakarmana*^[9] – *Kledana*, *Tarpana* and *Poorana*).

Tarpaka Kapha which is located in *Shira* provides the nourishment to eyes.^[10] *Shleshaka Kapha* helps in adherence of tear film over the globe of ocular surface.^[11] *Acharya sushruta* has mentioned *Kapha* as *Mala* of *Rasa dhatu*,^[12] while *Sharangadhara* stated that excretion of watery fluid from adjoint areas of eyes is said to be *Mala*-excreta of *Rasa dhatu*,^[13] thus it provides moistures to the ocular surface and protects the eye against the dryness.

Ayurvedic concept of control of Lacrimal Functional Unit

Krishna Mandala, being the seat of *Vata Dosha*^[1] probably monitor the minute change in the ocular surface. Any change in the equilibrium of ocular surface due to exogenous or endogenous factors, will stimulate the *Prana vayu*^[14] to act reflexly and transmit impulses to the *Shira* (seat of *Prana Vayu* and *Tarpaka Kapha*^[15]). This stimulation will initiate the *Tarpaka Kapha* to carry out its function i.e. *Kledana*, *Tarpana* and *Poorana*.^[16] *Tarpaka Kapha* will perform its function by the help of its *Ashrayi Dhatu*s (*Sneha Dhatu*s)^[17] to act on the ocular surface.

Pitta Dosha which has the specific seat at *Netra* and having the unique feature of *Pachana*^[18] will assimilate the *Dhatu*s secreted by the *Tarpaka Kapha* and form a stable tear film and maintain the normal *Prabha* (luster)

and *Mardava* (softness)^[19] of the ocular surface. *Vyana Vayu* which circulates all over the body will help the normal lid movements and *Dhatu Tarpana*.^[20]

This reflex arc will help to maintain the ocular surface integrity and immunity which facilitate the proper

optical function of the eye. *Prana* and *Vyana Vayu* along with *Pachaka Pitta* and *Tarpaka Kapha* are the *Doshas* involved in this reflex arc for the proper operation of Lacrimal functional unit.

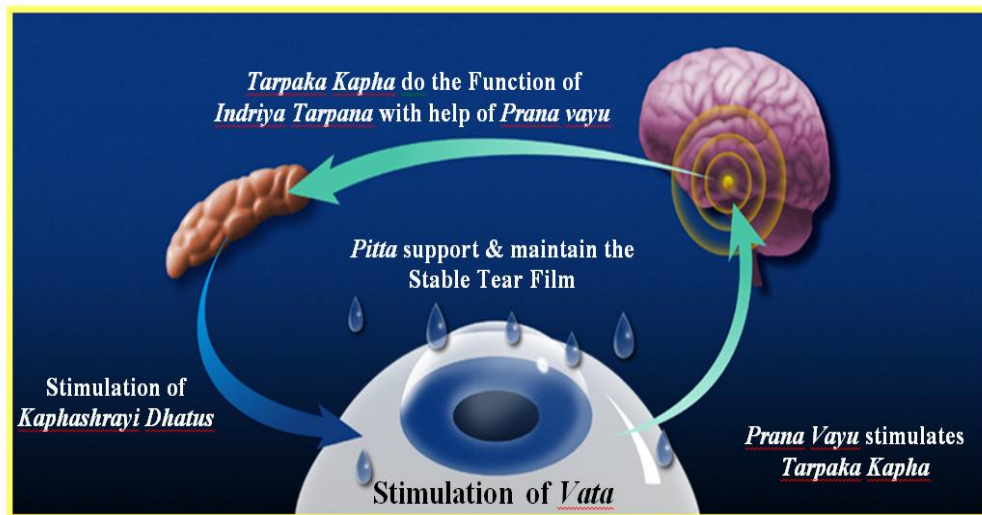


Figure –Control of Lacrimal Functional Unit by Tridoshas

REFERENCES

1. Sushruta. Sushruta Samhita Dalhana Comm.- Nibandhasangraha, Chaukhambha Orientalia Varanasi, 2002, Uttaratantra 1/11-12.
2. Ibid Sushruta. Sushruta Samhita Uttaratantra 2/5.
3. Ibid Sushruta. Sushruta Samhita Shareerasthana 9/5.
4. Vagbhata, Astanga Hridaya- Vidyotini Comm. Kaviraja Atrideva Gupta, Chaukhambha Prakashan, Varanasi, Reprint 2007; Uttaratantra 11/18.
5. Agnivesha, Charaka Samhita, Comm. Chakrapanidatta Ed. R.K. Sharma, Bhagawandas, Chaukhambha Sanskrita Series, Varanasi, 1984; Sutrasthana 12/8.
6. Ibid Vagbhata, Astanga Hridaya Sutrasthana 1/11.
7. Ibid Sushruta. Sushruta Samhita Sutrasthana 15/3(2).
8. Ibid Vagbhata, Astanga Hridaya Sutrasthana 1/12.
9. Ibid Sushruta. Sushruta Samhita Sutrasthana 15/4.
10. Ibid Vagbhata, Astanga Hridaya Sutrasthana 12/17.
11. Ibid Vagbhata, Astanga Hridaya Sutrasthana 12/18.
12. Ibid Sushruta. Sushruta Samhita Sutrasthana 46/529.
13. Sharangadhara, Sharangadhara Samhita, Krushna Hindi Comm., Shri Radhakrishna Parashar, Baidhyanath Ayurved Bhavan, Nagpur. reprint 1994; Poorvakhanda 5/25-26.
14. Vriddha Vagbhata, Ashtanga Samgraha – Sashilekha comm. Indu, Chaukhambha Krishna Das Academy, Varanasi, 2000; Sutrasthana 19/2.
15. Ibid Vriddha Vagbhata, Astanga Samgraha Sutrasthana 20/3-8.
16. Arunadatta, Astanga Hridaya – Sarvanga Sundari Comm., Chaukhambha Krishna Das Academy, Varanasi, 2000; sutrasthana 12/15-16.
17. Ibid Vriddha Vagbhata, Astanga Samgraha Sutrasthana 20/13.
18. Ibid Vriddha Vagbhata, Astanga Samgraha Sutrasthana 20/7.
19. Ibid Vagbhata, Astanga Hridaya Sutrasthana 1/11; 11/3.
20. Ibid Vriddha Vagbhata, Astanga Samgraha Sutrasthana 20/6.