



A REVIEW ON TARPAKA KAPHA AND ITS PHYSIOLOGICAL RELEVANCE

Sonia Mathew

M D Scholar, Department of Kriyasareera, Govt. Ayurveda College, Pariyaram, Kannur, Kerala, India

Corresponding Author: soniasweety1993@gmail.com

<https://doi.org/10.46607/iamj09p6052022>

(Published Online: September 2022)

Open Access

© International Ayurvedic Medical Journal, India 2022

Article Received: 27/09/2022 - Peer Reviewed: 30/09/2022 - Accepted for Publication: 03/10/2022



ABSTRACT

Tridosha is a unique concept in Ayurveda. Physiology, pathology, and therapeutics are based on the doctrine of *Dosha*. The theory of the three somatic humors is *Vata*, *Pitha* and *Kapha*. *Doshas* are the factors that vitiate other substances after getting vitiated. In which *Kapha* represents a potential source of strength that resist disease and decay. *Kapha* indicates the major constituents of water in the body. The five divisions of *Kapha* bear a striking resemblance with extracellular fluid in the view of *Ambukarma* of *Kapha*. The functions of *Tarpaka kapha* may be in resemblance to functions of CSF, endolymph, perilymph, aqueous humour, viscous humour, fluid in lamina propria of the olfactory mucous membrane etc.

Key words: *Tridosha*, *Kapha*, *Tarpaka kapha*

INTRODUCTION

Dosha, *Dhatu* and *Mala* are considered the root of our body.¹*Kapha* is one of the *Tridosha*. *Kapha dosha* help in the maintenance of structural and functional integrity of the body. The word *dosha* is derived from the root – *Dush vaikrithai*, meaning that which is susceptible to vitiation. *Vata*, *Pitha* and *Kapha* are the causative agents of the origin of the body and the body supported by them. The locations of *Doshas* in a normal state are downward, middle, and upward. *Tridosha* in our body acts like a house with three pillars. These are

called *Tristhuna*.² The term *Kapha* is derived from the two words – *Ka* and *Pha* meaning water (*Ka*) and flourishes (*Pha*) simultaneously. Thus, it has been cleared, that which flourishes in the presence of water is called *Kapha*. *Sleshma* is the synonym of *kapha*. *Sleshma* is derived from the root word *Slish alinganae* means to embrace, to cohere, or to keep together. So, *Sleshma* means that which is responsible for the integrity and attachment.³*Kapha* is considered the stable

substance of the body, its stability is due to its *Apya* and *Parthiva mahabhuta* predominance.⁴

According to caraka samhitha, the qualities of *Kapha-Guru* (heavy), *Seeta* (cool), *Mridu* (soft), *Snigdha* (viscous), *Madhura* (sweet), *Sthira* (stable), *Pichila* (slimmy), *Sweta* (white), *Lavana* (salty), *Mrisana* (soft), *Manda* (dull) and *Slakshna* (smooth).⁵ Unctuousness, coolness, whiteness, heaviness, sweetness, steadiness, sliminess and viscosity are the inherent qualities of *Kapha*.⁶ *Soma* (*Chandra* or *Jaladevatha*) which is represented by *Kapha* in the body. These bring about good or bad effects according to their normal or abnormal state. Although Doshas are omnipresent in the body, the predominance of *Kapha* is above the epigastrium.⁷ The general sites of *Kapha* in the body are *Ura* (chest), *Shira* (head), *Greeva* (neck), *Parvas* (joints), *Amasaya* (stomach), *Meda* (adipose tissue), *Jihva mula* (the root of the tongue), *Kanta* (trachea), *Kloma*, *Rasa*, *Ghrana* (nose).⁸ *Kapha*, in general, represents a potential source of strength that resists disease and decay. Its function can be correlated to that of fluid balance, nutrition, tissue building, and immunological and anabolic activities. Types of *Kapha* in the body are *Avalambaka kapha*, *Kledaka kapha*, *Bodhaka kapha*, *Tarpaka kapha* and *Sleshaka kapha*. The functions of *Tarpaka kapha* are nourishment and smoothening of *Indriya*.⁹

DISCUSSION

In general, the physiological actions performed by *Kapha dosha* in the body are,

- *Kapha* because of its viscous quality is responsible for keeping the unctuousness of the body
- *Kapha* being its binding nature, binds together the various structures of the body, particularly the joints
- *Kapha* because of its predominance on the *Prithvi mahabhuta* and heavy and stable qualities, is responsible for the strength, stability, and firmness of the body
- It contributes to the sexual potency and capacity to produce progeny
- It is responsible for the promotion of strength and resistance to disease
- It promotes the process of healing and reparative
- *Kapha* because of its fluid component is responsible for the formation and maintenance of different body fluids

- The psychic activates like forbearance, patience, greed lessness, knowledge, and memory is controlled by *Kapha dosha*

This article discussed the relevance of *Tarpaka kapha* in the physiological aspect. *Tarpaka kapha* is located in the head.¹⁰ Function of *Tarpaka kapha* is *Aksha tarpana*. The word *Aksha* refers to the general *Indriyas*. Moreover, all the sense organs are present in the head, and *Tarpaka kapha* is also present in the head. It nourishes and smoothenes the sensory organs with its *Snehana* qualities and enables the sensory organs to perform their physiological actions.¹¹

Different fluids which perform *Indriya tarpana* in the head are cerebrospinal fluid (CSF), endolymph, perilymph, aqueous humour, vitreous humour, and lamina propria of olfactory mucous membrane secrete serous fluid. Cerebrospinal fluid circulates through sub arachnoid space of the meninges and ventricles of the brain which supports and protects the mastaka. The endolymph that is present in the membranous cochlea and the perilymph that is present in osseous canals. This fluid participates in the conduct of sound waves and forms part of the mechanism of the audition. The aqueous humour is a clear watery fluid that occupies the anterior and posterior chambers and the vitreous humour that lies behind the lens and the ciliary process. This helps the eye serve as a refracting media of the organ. The lamina propria of the olfactory mucous membrane secretes a serous fluid that provides a solvent for odorous materials. In general, the function of *Tarpaka kapha* is *Indriya tarpana*. The functions related to *Indriya* are explained as the meaning of *Indriya* means apparatus which exhibits symptoms of vitality.¹² *Indriya* get originated from the excel part of *Kapha* and *Raktha*.¹³ *Indriyas* are developed and differentiated during the third month of intrauterine life.¹⁴ *Panchendriyas* are *Chakshurendriya* (Eye), *Srothredriyam* (Ear), *Ghranendriyam* (Nose), *Rasanendriyam* (Tongue), *Sparsendriyam* (Skin). The functions of *Rasenendriyam* are controlled by *Bodhaka kapha*.¹⁵

Tarpaka kapha in *Chakshurendriya*

In all *Ekadesa Indriyas*, *Netra* is the supreme. *Chakshu* is *Pitha sthana*, but its nourishment is governed by *Tarpaka kapha*. The *Nirukti* of *Kapha* is *Kena jalena phalati ithi kapha*. It means which originated from water. So, the fluid part of the eyes is aqueous and vitreous humour. Their functions are related to *Tarpaka kapha*. Aqueous humor is a clear fluid that fills and helps to form the anterior and posterior chambers of

the eye. The lens and cornea must remain clear to allow light transmission. It is secreted by the ciliary epithelium lining the ciliary process and enters the posterior chamber. Constituents of normal aqueous humour are water (99.9%), proteins (0.04%), and others like sodium, chloride, glucose, lactic acid, aminoacids, and inositol in millimoles per kilogram.¹⁶ It provides nutrition, removes excretory products from metabolism, transports neurotransmitters, stabilizes the ocular structures and contributes to the regulation of the homeostasis of these ocular tissues. Vitreous humor is a fluid-like gel, composed of approximately 98-99% water with trace amounts of hyaluronic acid, glucose, anions, cations, ions, and collagen. It is located in the posterior chamber of the eye. Due to its location, which is relatively inaccessible and protected from trauma by the orbital bone and eye. It serves as a stabilizer and shock absorber for any movement or mechanical impact reaching the retina and lens.

Tarpaka kapha* in *Ghranendriyam

The olfactory mucosa is the part of the nasal mucosa that carries the specialized sensory organ for the modality of smell. Olfactory mucosa is confined to the upper one-third of the nasal cavity. It includes the roof of the nasal cavity and the adjoining areas on the septum and superior nasal concha.¹⁷ The odorant molecules must dissolve in the mucous layer before they can come in contact with olfactory receptors. The lamina propria of the olfactory mucous membrane secretes a serous fluid that provides a solvent for odorous materials. The effective odorant molecule must be volatile, water-soluble, and lipid soluble.

Tarpaka kapha* in *Srotendriya

The bony cochlea containing the membranous cochlear duct forms the auditory apparatus. This contains two types of fluids that help in auditory function and equilibrium. The fluids are perilymph and endolymph. Perilymph is the fluid present in the scale tympani and scale vestibuli compartments of the cochlea. Its composition is similar to that of ECF in that it is high in sodium ions and low in potassium ions. Endolymph is the fluid present within the scale media or membranous cochlea. Its composition is similar to ICF in that it is high in potassium ions and low in sodium ions. It is secreted by the stria vascularis which forms the lateral wall of scale media.

***Tarpaka kapha* as cerebrospinal fluid**

Cerebrospinal fluid (CSF) is a clear fluid circulating in the intracranial and spinal compartments. CSF is mainly formed by the choroid plexuses, which are cov-

ered by specialized ependymal cells. The choroid plexuses are located in the cerebral ventricles. The functions of CSF are protection to CNS as a water jacket, as it absorbs shock in the event of a blow, removal of waste products of brain metabolism regulates extracellular environment for the neurons of CNS, transport hormones and hormone releasing factors.¹⁸ CSF analyses help to diagnose various neurological pathologies.

The abnormal condition of *Tarpaka kapha* in this area leads to some fluid-related pathologies in *siras* (upper clavicle region). It includes glaucoma, hydrocephalous, dry eye, etc

Glaucoma is a degenerative disease characterized by raised IOP and loss of retinal ganglion cells. The local factors which influence the level of IOP are the rate of aqueous formation and resistance to aqueous drainage. A dry eye is a condition in which tears are not able to provide adequate lubrication for the eyes. It is caused by a disruption in the tear film. The tear film has three layers –fatty oily, aqueous fluid, and mucus. This combination usually keeps the surface of the eye lubricated, smooth and clear. Decreased kapha gives rise to roughness.¹⁹ The aqueous fluid gets decreased in aging, in certain medical conditions like SLE, in using certain medicines like antihistamines, in corneal nerve de sensitivity caused by contact lens use, etc.

Hydrocephalus is a condition in which excess CSF is within the ventricles of the brain. The term hydrocephalus is derived from the Greek words- hydro means water and Cephalus means the head. The accumulation of CSF occurs due to either an increase in the production of the fluid, a decrease in its rate of absorption, or from a condition that blocks its normal flow through the ventricular system.

CONCLUSION

Kapha dosha in *Prakrta avastha* is known as *Bala* and in *Vikrutha Avastha* is called *Mala*. It means the *Kapha* act as an important factor for maintaining health by protecting the body from the disease-causing agent. All types of *Kapha* in different parts of the body act as *Bala*. Especially *Tarpaka kapha* help to maintain the *Indriyas*, which is in *Siras*. If *Vaikruth avastha* of this *Tarpaka kapha* causes some pathological conditions like hydrocephalus, dry eye, glaucoma, etc. The important *Sodhana* therapy in *Kapha dosha* is *Vamanam* and *Samana* treatment is *Madhu* (honey) ad-

ministration. *Tiktha, Katu, and Kashaya rasa* are pacifying the *Kapha*. So, it should be maintained by any effort.

REFERENCES

1. Prof. K.R Sreekanth Murthy. Illustrated Susruta Samhitha, text with English translation, notes, appendices, and index. Reprint edition. Varanasi: Choukhamba Orientalia; 2012. Volume 1, Sutra sthana. Chapter 15. p.98
2. Prof. K.R Sreekanth Murthy. Illustrated Susruta Samhitha, text with English translation, notes, appendices, and index. Reprint edition. Varanasi: Choukhamba Orientalia; 2012. Volume 1, Sutra sthana. Chapter 21. p.152
3. Prof. K.R Sreekanth Murthy. Illustrated Susruta Samhitha, text with English translation, notes, appendices, and index. Reprint edition. Varanasi: Choukhamba Orientalia; 2012. Volume 1, Sutra sthana. Chapter 21. p.6
4. Prof. K.R Sreekanth Murthy. Ashtanga sangraha of Vagbhata. Reprint edition. Varanasi: Chaukhamba Orientalia; 2012. Volume 1, Sutra sthana. Chapter 20.p.367
5. Vaidhya Jadavji Trikamji Acharya. Charaka samhitha by Agnivesa revised by Charaka and Drdhabala with Ayurveda Dipika commentary of Chakrapanidatta. Reprint edition. New Delhi: Chaukhambha publications; 2014.Sutra sthana. Chapter 1/16. p.6
6. Vaidhya Jadavji Trikamji Acharya. Charaka samhitha by Agnivesa revised by Charaka and Drdhabala with Ayurveda Dipika commentary of Chakrapanidatta. Reprint edition. New Delhi: Chaukhambha publications; 2014.Sutra sthana. Chapter 20/18. p.114
7. Prof.K.R. Srikantha Murthy. Vagbhata's Ashtanga Hridayam.9th edition. Varanasi: Chaukhambha Krishnadas Academy; 2013. Volume 1, Sutrashtana. Chapter 1/7. p.7
8. Prof. K.R Sreekanth Murthy. Illustrated Susruta Samhitha, text with English translation, notes, appendices, and index. Reprint edition. Varanasi: Choukhamba Orientalia; 2012. Volume 1, Sutra sthana. Chapter 21/3. p.153
9. Prof. K.R Sreekanth Murthy. Illustrated Susruta Samhitha, text with English translation, notes, appendices, and index. Reprint edition. Varanasi: Choukhamba Orientalia; 2012. Volume 1, Sutra sthana. Chapter 21/14. p.156
10. Prof.K.R. Srikantha Murthy. Vagbhata's Ashtanga Hridayam.9th edition. Varanasi: Chaukhambha Krishnadas Academy; 2013. Volume 1, Sutrashtana. Chapter 12/17. p.315
11. Prof. K.R Sreekanth Murthy. Illustrated Susruta Samhitha, text with English translation, notes, appendices, and index. Reprint edition. Varanasi: Choukhamba Orientalia; 2012. Volume 1, Sutra sthana. Chapter 21/14. p.156
12. Dr. Ram Karan Sharma and Vaidya Bhagwan Dash. Agnivesa's Charaka samhitha text with an English translation and critical exposition based on Chakrapanidutta's Ayurveda Dipika. Reprint edition. Varanasi: Chaukhamba Sanskrit series office; 2002.Indriyasthan sthana. Chapter 1/1. p.358
13. Prof. K.R Sreekanth Murthy. Ashtanga sangraha of Vagbhata. Reprint edition. Varanasi: Chaukhamba Orientalia; 2012. Volume 2, Sareera sthana. Chapter 6.p.58
14. Dr. Ram Karan Sharma and Vaidya Bhagwan Dash. Agnivesa's Charaka samhitha text with an English translation and critical exposition based on Chakrapanidutta's Ayurveda Dipika. Reprint edition. Varanasi: Chaukhamba Sanskrit series office; 2002. Sareera sthana. Chapter 7/11. p.310
15. Prof. K.R Sreekanth Murthy. Illustrated Susruta Samhitha, text with English translation, notes, appendices, and index. Reprint edition. Varanasi: Choukhamba Orientalia; 2012. Volume 1, Sutra sthana. Chapter 21. p.157
16. Indu Khurana et al. Textbooks of medical physiology.3rd edition. Elsevier;2015. Chapter11, p.1052
17. Indu Khurana et al. Textbooks of medical physiology.3rd edition. Elsevier;2015. Chapter11, p.1072
18. Indu Khurana et al. Textbooks of medical physiology.3rd edition. Elsevier;2015. Chapter10, p.894
19. Prof. K.R Sreekanth Murthy. Illustrated Susruta Samhitha, text with English translation, notes, appendices, and index. Reprint edition. Varanasi: Choukhamba Orientalia; 2012. Volume 1, Sutra sthana. Chapter 15/5. p.99

Source of Support: Nil

Conflict of Interest: None Declared

How to cite this URL:Sonia Mathew: A review on Tarpaka kapha and its physiological relevance. International Ayurvedic Medical Journal {online} 2022 {cited September 2022} Available from: http://www.iamj.in/posts/images/upload/3687_3690.pdf