

A REVIEW ARTICLE ON THE ALOCHAK PITTA CORRELATED TO VISION

Dr. Shalini Chauhan^{*1}, Dr. Amita Chauhan² and Dr. Yuvraj Singh³

¹Assistant Professor, P.G. Department of *Kriya Sharir*, Surajmal Medical College of Ayurveda and Hospital, Udham singh Nagar, Uttarakhand, India.

²Assistant Professor, Department of Shalya Tantra, Shri Babu Singh Dadduji Ayurvedic Medical College, Krishna Nagar, Fatehgarh, Farrukhabad.

³M.B.B.S., M. D., Anesthesia.

Article Received on
23 August 2022,

Revised on 13 Sept. 2022,
Accepted on 03 October 2022

DOI: 10.20959/wjpr202214-25791

*Corresponding Author

Dr. Shalini Chauhan

Assistant Professor, P.G.
Department of *Kriya Sharir*,
Surajmal Medical College of
Ayurveda and Hospital,
Udham singh Nagar,
Uttarakhand, India.

ABSTRACT

Idea of Tridosha is a one of a kind idea of Ayurveda. Tridosha (Vata, Pitta and Kapha) are the essential mainstays of the human body. Tridosha control willful and physiological capabilities of body developments, and backing the body in a typical and sound state. Pitta is dependable for creation of intensity, internal heat level and visual discernment. There are five sorts of Pittas, in particular Ranjaka, Pachaka, Alochaka, Sadhaka, Brajaka. 'Alochaka Pitta' signifies the Pitta which is answerable for vision. 'Drishti' is the seat of Alochaka Pitta. Ayurveda has depicted this physiology of vision in light of the elements of Vata and Pita.^[1] Alochaka Pitta is addressed by the colors of retina viz rhodopsin, iodopsin and melanin. Poles and cones which are present in retina are answerable for variety vision and for the

impression of shape and brilliant picture. In this survey article area and capability of Alochak Pitta and its cutting edge relationships with the physiology of vision is portrayed.

KEYWORDS: Tridosha, Alochaka Pitta, Vata, vision, Ranjaka.

INTRODUCTION

Life begins from a treated ovum. Vatta, Pitta what's more, Kapha are the constituents of the multitude of cells counting sperm and ovum which join together and bring forth another person. Dosha is framing the disposition or Prakriti of an individual by birth and furthermore having the autonomous force of delivering illnesses. Dosha is answerable for arrangement,

upkeep and insurance of the body during its physiological condition. Doshas are of three sorts to be specific Vata, Pitta and Kapha. Maharshi Sushruta called it as "Tristhuna" like the house depends on points of support (Sthuna) in a similar way body depends on this Tristhuna. At the point when Vata, Pitta and Kapha are vitiated they produce infection and when they are in balance, they keep up with awesome equilibrium and amicability in the body. Pitta addresses energy, intensity or fire in the body and performs fire like activities in the body.^[4] The Pitta in the body which is situated in the structure of Agni is liable for assimilation and digestion. Pitta is having strength of Agni Mahabhuta. The activities like Dahana, Pachana can't happen in that frame of mind without Pitta. Pitta helps in great vision, absorption of the ingested food and its digestion. It keeps up with the typical internal heat level, typical creation of yearning, thirst, appetite, and appearance, shine of the body, insight, boldness, bravery, delight and non-abrasiveness of the body. Alochaka Pitta implies the Pitta which is answerable for vision. Alochaka Pitta empowers us to see things, see and dissect them. Drishti or vision is the seat of Alochak Pitta.^[6] Drishti implies vision, that which empowers us to see things around us and see them in the right sense. Alochaka Pitta is addressed by the shades of retina viz rhodopsin, iodopsin and melanin. Bars and cones which are available in retina are liable for variety vision and for the impression of shape and brilliant picture. Poles and cones are visual receptors which changes over the energy into electrical possibilities through some synthetic reactions.

MATERIALS AND METHODS

The Bruhatrayi were investigated in regards to the references for the idea of the Alochaka Pitta. Afterward, physiological parts of the eye concerning feeling of vision were contemplated from present day physiology books. Afterward, steady relationship was finished among Ayurvedic and current views.

TYPES OF ALOCHAK PITTA

Acharya Bhela portrayed two sorts of Alochaka Pitta.^[5]

- i Chakshur Vaisheshika Alochak Pitta
- ii Buddhi Vaisheshika Alochak Pitta

i CHAKSHUR VAISHESHIKA ALOCHAK PITTA

This part of Alochaka Pitta is bound to eye for example just physical eye. The visual insight happens after coordination of these parts.

- a) **Chakshuindriyaaartha** - When we see the articles

- b) **Chakshuindriya** - Organ of visual insight, all parts of physical eye engaged with seeing the picture of item.
- c) **Manas** - Brain separates between the visual items which are gainful and those which are unsafe.
- d) **Ahankara** - Selfishness of a singular will give the predominance and guarantee to see the things.
- e) **Buddhi** - Acumen judges in the event that the data ought to be acknowledged or not.
- f) **Atma** - Soul will encounter the insight subsequent to being related with mind.^[8]

ii BUDDHI VAISHESHIKA ALOCHAK PITTA

This part of Alochaka Pitta is situated past the eyes in cerebrum. It is situated in the locales of Sringhataka between the eyebrows. It sees the moment and unprecedented issues delivered in Atma (awareness). This piece of vision Pitta empowers in maintenance of assembled data as a primary concern. Remembering the past events, imagines the occasions that are probably going to occur in future and makes nonexistent occasions as though they have occurred now as of now. Offers the viewpoints, which it has gotten furthermore, held in it. In the infant, it prompts the craving and method of sucking the bosom milk as though prepared by some individual. Give the force of pratyahara to the yogis.^[10]

FUNCTIONS OF ALOCHAKA PITTA

There are two parts which assume a significant part in the capability of Alochaka Pitta. One of its parts Chakshur Vaisheshika Alochaka Pitta is bound to eye. It helps in seeing the seen objects. It helps in recognizing and knowing different parts of objects. The second part of vision Pitta found between the eyebrows in the area of Sringhataka, addresses the focal controls of vision, situated in front facing area of brain. This helps in holding the visual data and later remembering the saved data through memory, creative mind and fixation.^[9,8]

VISION IN AYURVEDA

In Ayurveda physiology of vision depends on the elements of Vata and Pitta. Light (Prakasha) is having Sookshma Guna, because of Sookshma Guna of Prakasha it arrive at till the photograph receptors in retina crossing different layers. Chala Guna of Vata is liable for photochemical action in retina. Electrons are in a condition of movement because of Chala Guna of Vata. At the point when light falls on electrons, their power of movements increments. Because of Ushna Guna of Prakasha and Pitta alongside Chala Guna of Vata is capable in changing the cis type of retina in to change. Dhatu are the primary and supporting

units of the body. As retina is the primary unit that gives the capability of vision, so retina can be considered as a Dhatu.^[3] Retina can be related with all Dhatu, in view of various capabilities, yet straightforwardly in the visual cycle is contrasted and Raktadhatu. Jeevanam is the capability of Raktadhatu. Jeevanam implies food of capability or life. A design can carry out its role just within the sight of life. In retina the photograph receptors are the essential driver for visual cycle. Loss of vision is because of annihilations of these receptors, so they can be considered as Raktadhatu.^[6] Electric energy is having Sookshma Guna of Vata. Power can stream in a unidirectional way like the progression of water from a tap. Like the development of air it can't move to some other heading right away with next to no provocation. The electrical potential created in the photograph receptors flows through the Srotas are named as Roopavaha Dhamani.^[8]

VISION IN MODERN

Visual interaction is the series of activities that occur during visual discernment. During visual cycle, picture of an article zeroed in on retina, bringing about the creation of visual view of that item. At the point when the picture of an article in climate is centered around retina, the energy in visual range is changed over into electrical possibilities by bars and cones of retina through a few compound responses. Motivations from poles and cones arrive at the cerebral cortex through optics nerve and the vibe of vision is created in cerebral cortex.^[7] Retina contains the visual receptors, which are likewise called photoreceptors or electromagnetic receptors. Visual receptors are poles and cones. They are answerable for variety vision and view of sharp, splendid pictures. Poles are especially delicate to diminish light and they serve, prevalently in the recognition of movement. Rhodopsin is the photosensitive color of pole cells. It is comprised of a protein called opsin and a chromophore. Opsin present in rhodopsin is known as scotopsin.^[11] Chromophore present in the bar cells is called retinal. Retinal is present as 11-cis retinal known as retinal 1. Photosensitive shade in cone cells is of three kinds, specifically porphyropsin, iodopsin and cyanopsin. Photopigment in cone cell is a formed protein comprised of a protein and chromophore. Protein in cone shade is called photopsin. Visual pathway or optic pathway is the anxious pathway that sends driving forces from retina visual focus in cerebral cortex. Visual pathway comprises of six parts:-

- 1) Optic nerve
- 2) Optic chiasma
- 3) Optics tract.

- 4) Lateral geniculate body.
- 5) Optic radiation
- 6) Visual cortex.^[12]

DISCUSSION

There are five sorts of Pitta to be specific Ranjaka, Pachaka, Alochaka, Sadhaka, Brajaka. The Akshi is visesha sthana of Alochaka Pitta. Alochaka Pitta is answerable for rupagrahana. In the advanced color of retina for example rhodopsin and iodopsin can be firmly connected to Alochaka Pitta because of likeness in area and capability of these parts. Rhodopsin is framed in the layer of poles and is liable for dull vision. Poles are especially delicate to diminish light and they serve transcendently in identification movement. The nerve drive is brought about by deterioration of rhodopsin into two divisions i.e. opsin and retinine. Retinine is again retransformed into vitamin A and consequently rhodopsin is recovered. Cones contain iodopsin. Variety vision and photopic vision for example light vision happens in layer of cones. The color layer of retina contains melanin. This makes the eye a dim chamber and forestalls interior impression of light beams.

There are no investigations done in regards to the connection between's the elements of Alochaka pitta and current viewpoint. Vata, pitta, and kapha dosha are answerable for homeostasis of the human body. Pitta doshas are fluid in nature, might be addressed as protein, chemical, and synapse. Energy-producing substances likewise intervene compound responses. Pitta dosha likewise assumes a significant part in neurotransmission. It is because of the properties of and pitta, for example, teekshna, ushma, drava, and sara. Pitta dosha is of five sorts, specifically Pachaka, Ranjaka, Alochaka, Sadhaka, and Bhrajaka. The site of Alochaka pitta is netra (eye) and its just capability is visual discernment without understanding. In current science, the pathway among rods and cones to the visual cortex is called as the optic pathway. In view of the elements of Alochaka pitta, we can recognize various synthetic variables, in light of contemporary current clinical sciences answerable for similar capabilities. The substance factors are, in all honesty, the photochemicals, compounds, and synapses in the optic nerve pathway for vision. Rhodopsin, iodopsin, bathorhodopsin, lumirhodopsin, metarhodopsin-1, Metarhodopsin-2, isomerase chemical, and the synapse liable for correspondence in the optic pathway might be addressed as Alochaka pitta. Acharya Bhela has characterized Alochaka pitta into two kinds. Chakshyu vaisheshika and buddhivaisheshika. Chakshyu vaisheshikapitta helps in the impression of

visual pictures acquired from the current environmental elements, while Buddhi vaisheshika pitta helps in dissecting the got data, creating considerations, make desire, and deciding response. Chakshyu vaisheshika pitta might be considered as the synapses engaged with the optic pathway, address alochaka pitta. Buddhi vaisheshika pitta might be addressed as the synapse answerable for correspondence between the visual cortex affiliation region, engine cortex, also, subcortical locale. Again the synapse that is answerable for correspondence between the affiliation area of cerebral cortex, tangible cortices, engine cortices and subcortical part like thalamus, limbic framework, reticular development of the cerebrum for age of considerations, memory, and information.

CONCLUSION

Alochaka Pitta is a subtype of Pitta which is liable for sight and thinking process. Alochaka Pitta empowers us to see things, see and examinations them. Drishti or vision is the seat of Alochaka Pitta. Drishti implies vision which empowers us to see things around us and see them in the right sense. In the cutting edge science, shade of retina for example rhodopsin and iodopsin can be firmly associated to Alochaka Pitta because of similitude in area and capability of these parts. Alochaka Pitta deciphers the visual upgrades of light and variety, changing over electrical driving forces into vision that can be perceived and perused by the mind. It processes and absorbs data. It has been contended that Alochaka Pitta administers inward as well as outer vision. In this scholarly review, we gathered different information from the Ayurvedic works of art with the accessible analyses, as well as the course books of current clinical sciences, different articles for better comprehension of the idea of Alochaka pitta and its examination with contemporary science. Ayurveda is a science in view of useful understandings. As a general rule, pitta is drava (fluid) in nature and engaged with processing, digestion, biochemical responses, synthetic couriers at each level in the human body. It is because of its teekshna, ushma, and sara properties. Alochaka pitta is arranged in netra. It is answerable for roopalochana (impression of vision). Based on practical comprehension, the photosensitive synthetic substances in the eye called photopigment and the entire compound cycles engaged with the photochemistry of vision, synapses associated with visual pathway from the retina to the visual cortex might be addressed as Alochaka pitta. There is a need of additional exploration to assess exhaustively any remaining doshas.

REFERENCES

1. Acharya JT, Charaka Samhita by Agnivesa with Ayurveda deepikateeka of Chakrapanidatta, Sutrasthana, Dirghanjivitiyaadhyaya, Reprint ed, Varanasi; Chaukhambha Orientalia, 2016; 1(57): 16.
2. Acharya JT, SushutaSamhita by SushrutaSutrasthana, Vranaprasnabadhyaye, Reprint ed, Varanasi; ChowkambaSansthan, 2017; 21(9): 100.
3. Acharya JT, CharakaSamhita by Agnivesa with Ayurveda deepikateeka of Chakrapanidatta, Sutrasthana, Trisothiyaadhy aye, Reprinted, Varanasi; Chaukhambha Orientalia, 2016; 18(50): 109.
4. Acharya JT, SushutaSamhita by SushrutaSutrasthana, Vranaprasnabadhyaye, Reprint ed, Varanasi; ChowkambaSansthan, 2017; 21(10): 101.
5. Acharya JT, CharakaSamhita by Agnivesa with Ayurveda deepikateeka of Chakrapanidatta, Sutrasthana, Trisothiyaadhy aye, Reprinted, Varanasi; Chaukhambha Orientalia, 2016; 18(50): 109.
6. Paradara HSS, AshtangaHrudaya with Sarvangasundara commentary of Arunadatta and Ayurveda rasayana commentary of Hemadri. Reprint ed, Varanasi, Chaukambha Sanskrit Sansthan, 2017; 12(15): 194.
7. Sembulingam K, Sembulingam P, Essentials of Medical Physioly, 7th ed, New Delhi: Jaypeebrother's medical publishers, 2016; 1012.
8. P.V. Sharma, BhelSamhita English translation by K.H.Krishnamurthy, Sharirsthana, Purusanicayam, Reprint ed, Varanasi; Chaukhambha Bharati Academy, 2006; 4(5): 206.
9. P.V. Sharma, BhelSamhita English translation by K.H. Krishnamurthy, Sharirsthana Purusanicayam, Reprint ed, Varanasi; Chaukhambha Bharati Academy, 2006; 4(5): 206.
10. P.V. Sharma, BhelSamhita English translation by K.H.Krishnamurthy, Sharirsthana Purusanicayam, Reprint ed, Varanasi; Chaukhambha Bharati Academy, 2006; 4(5): 206.
11. Sembulingam K, Sembulingam P, Essentials of Medical Physiology, 7th ed, New Delhi: Jaypeebrothers medical publishers, 2016; 1012.
12. Sembulingam K, Sembulingam P, Essentials of Medical Physiology, 7th ed, New Delhi: Jaypee brother's medical publishers, 2016; 1013.