

THE PHYSIOLOGICAL STUDY ON THE ALOCHAK PITTA - A REVIEW ARTICLE

Ramesh Kumar^{*1}, Rajesh Kumar Sharma², Dinesh Chandra Sharma³¹M.D. Scholar (Dpt. Of Kriya Sharir), DSRRAU Jodhpur, India.²Professor & HOD (P.G. Dpt. Of Kriya Sharir), DSRRAU, Jodhpur, India.³Associate. Prof. (P.G. Dpt. Of Kriya Sharir), DSRRAU, Jodhpur, India.***Corresponding Author: Ramesh Kumar**

M.D. Scholar (Dpt. Of Kriya Sharir), DSRRAU Jodhpur, India.

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ABSTRACT

The thought of Tridosha is a unique thought of Ayurveda. Tridosha (Vata, Pitta and Kapha) are the fundamental backbones of the human body. Tridosha control unshakable and physiological capacities of body improvements, and moving the body in a commonplace and sound state. Pitta is reliable for production of power, inner intensity level, and visual understanding. There are five kinds of Pittas, specifically Ranjaka, Pachaka, Alochaka, Sadhaka, Brajaka. 'Alochaka Pitta' means the Pitta which is liable for vision. 'Drishti' is the seat of Alochaka Pitta. Ayurveda has portrayed this physiology of the eye considering the components of Vata and Pita.^[1] Alochaka Pitta is tended to by the shades of retina viz rhodopsin, iodopsin and melanin. Shafts and cones which are available in retina are responsible for assortment vision and for the impression of shape and splendid picture. In this overview article, the region and capacity of Alochak Pitta and its state of the art associations with the physiology of vision are depicted.

KEYWORDS: Alochaka Pitta, Vata, Tridosha, Drishti, Ranjaka, iodopsin.**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 & 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 PITTAAcharya Bhela depicted two kinds of Alochaka Pitta.^[5]

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

i CHAKSHUR VAISHESHIKA ALOCHAK PITTA

This piece of Alochaka Pitta will undoubtedly eye for instance actual eye. Visual knowledge occurs after the coordination of these parts.

- a) Chakshuindriyaartha - When we see the articles
- b) Chakshuindriya - Organ of visual knowledge, all pieces of actual eye drew in with seeing the image of the thing.
- c) Manas - The mind isolates between the visual things which are profitable and those which are hazardous.
- d) Ahankara - Narrow-mindedness of a particular will give the prevalence and assurance to see things.
- e) Buddhi - Discernment decided if the information should be recognized or not.
- f) Atma - Soul will experience the knowledge ensuing from being connected with mind.^[8]

ii BUDDHI VAISHESHIKA ALOCHAK PITTA

This piece of Alochaka Pitta is arranged past the eyes in the frontal cortex. It is arranged in the districts of Sringhataka between the eyebrows. It sees the second and most remarkable issue conveyed in Atma (mindfulness). This piece of vision Pitta enables in support of gathered information as an essential concern. Recollecting past events imagines the events that are most likely going to happen in the future and makes nonexistent events like they have happened now at this point. Gives the perspectives, which it has gotten moreover, held in it. In the baby, it prompts the hankering and strategy for sucking the chest milk like ready by some person. Give the power of pratyahara to the yogis.^[10]

FUNCTIONS OF ALOCHAKA PITTA

There are two sections that expect a critical part in the capacity of Alochaka Pitta. One of its parts Chakshur Vaisheshika Alochaka Pitta will undoubtedly eye. It helps in seeing the seen objects. It helps in perceiving and knowing various pieces of objects. The second piece of vision Pitta found between the eyebrows in the space of Sringhataka, addresses the central controls of vision, arranged in the forward-looking area of the brain. This helps in holding the visual information and later recollecting the saved information through memory, imaginative psyche, and fixation.^[8,9]

VISION IN AYURVEDA

In Ayurveda physiology of vision relies upon the components of Vata and Pitta. Light (Prakasha) is having Sookshma Guna, due to Sookshma Guna of Prakasha it shows up until the photoreceptors in the retina cross various layers. Chala Guna of Vata is responsible for photochemical activity in the retina. Electrons are in a state of development in view of Chala Guna of Vata. Right when light falls on electrons, their force of development increases. Due to Ushna Guna of Prakasha and Pitta close by Chala Guna of Vata is able in changing the cis sort of retina in to change. What are the essential and supporting units of the body. As the retina is the essential unit that gives the capacity of vision, so the retina can be considered as a Dhatu.^[3] The retina can be connected with all Dhatu, considering different capacities, yet clearly, the visual cycle is differentiated

and Raktadhatu. Jeevanam is the ability of Raktadhatu. Jeevanam infers food of ability or life. A plan can complete its job just by seeing life. In the retina, the photoreceptors are the fundamental driver of the visual cycle. Loss of vision is a result of obliterations of these receptors, so they can be considered Raktadhatu.^[6] Electric energy is having Sookshma Guna of Vata. Power can stream in a unidirectional manner like the movement of water from a tap. Like the advancement of air, it can't move to some other heading immediately with close to no provocation. The electrical potential made in the photo receptors flows through the Srotas are named as Roopavaha Dhamani.^[8]

VISION IN MODERN

Visual connection is the series of exercises that happen during visual wisdom. During the visual cycle, the image of an article focused on the retina, achieving the making of visual perspective on that thing. Right when the image of an article in the environment is based on the retina, the energy in visual reach is changed over into electrical conceivable outcomes by bars and cones of the retina through a couple of compound reactions. Inspirations from shafts and cones show up in the cerebral cortex through the optic nerve and the energy of vision is made in the cerebral cortex.^[7] The retina contains the visual receptors, which are in like manner called photoreceptors or electromagnetic receptors. Visual receptors are posts and cones. They are responsible for an assortment of visions and perspectives on sharp, marvelous pictures. Posts are particularly sensitive to lessen light and they serve, commonly in the acknowledgment of development. Rhodopsin is the photosensitive shade of post cells. It is involved 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 available as 11-cis retinal known as retinal 1. Photosensitive shade in cone cells is of three sorts, explicitly porphyropsin, iodopsin and cyanopsin. Photopigment in cone cell is a shaped protein containing a protein and chromophore. Protein in cone conceal is called photopsin. The visual pathway or optic pathway is the restless pathway that sends the main thrusts from the retina visual concentration in the cerebral cortex. The visual pathway contains six sections:-

- 1) Optic nerve
- 2) Optic chiasma
- 3) Optics tract.
- 4) Lateral geniculate body.
- 5) Optic radiation
- 6) Visual cortex^[12]

DISCUSSION

There are five kinds of Pitta to be explicit Ranjaka, Pachaka, Alochaka, Sadhaka, Brajaka. The Akshi is visesha sthana of Alochaka Pitta. Alochaka Pitta is responsible for rupagrahana. In the high-level shade of the retina for instance rhodopsin and iodopsin can be solidly associated with Alochaka Pitta in view of the

resemblance in region and ability of these parts. Rhodopsin is outlined in the layer of shafts and is at risk for dull vision. Shafts are particularly fragile to reduce light and they serve fantastically in ID development. The nerve drive is achieved by crumbling rhodopsin into two divisions' i.e. opsin and retinene. Retinene is again retransformed into vitamin An and thusly rhodopsin is recuperated. Cones contain iodopsin. Assortment vision and photopic vision for instance light vision occur in layers of cones. The variety layer of the retina contains melanin. This makes the eye a faint chamber and thwarts the inside impression of light bars.

There are no examinations done concerning the association between the components of Alochaka pitta and the current perspective. Vata, pitta, and kapha dosha are liable for the homeostasis of the human body. Pitta doshas are liquid in nature and may be tended to as protein, compound, and neurotransmitter. Energy-producing substances moreover intercede compound reactions. Pitta dosha moreover expects a critical part in neurotransmission. It is a direct result of the properties of pitta, for instance, teekshna, ushma, drava, and sara. Pitta dosha is of five sorts, explicitly Pachaka, Ranjaka, Alochaka, Sadhaka, and Bhrajaka. The site of Alochaka pitta is netra (eye) and its simple capacity is visual insight without understanding. In current science, the pathway among bars and cones to the visual cortex is called the optic pathway. Considering the components of Alochaka pitta, we can perceive different engineered factors, considering contemporary current clinical sciences liable for comparative abilities. The substance factors are, believe it or not, the photochemical, mixtures, and neurotransmitters in the optic nerve pathway for vision. Rhodopsin, iodopsin, bathorhodopsin, lumirhodopsin, metarhodopsin-1, Metarhodopsin-2, isomerase synthetic, and the neural connection obligated for correspondence in the optic pathway may be tended to as Alochaka pitta. Acharya Bhela has portrayed Alochaka pitta in two sorts. Chakshyu vaisheshika and buddhivaisheshika. Chakshyu vaisheshikapitta helps in the impression of visual pictures obtained from the ongoing ecological components, while Buddhi vaisheshika pitta helps in analyzing the got information, making contemplations, making want, and choosing reaction. Chakshyu vaisheshika pitta may be considered as the neurotransmitters drew in with the optic pathway, addressing alochaka pitta. Buddhi vaisheshika pitta may be tended to as the neural connection liable for correspondence between the visual cortex alliance districts, motor cortex, likewise, subcortical region. Again the neural connection that is responsible for correspondence between the alliance area of the cerebral cortex, substantial cortices, motor cortices, and subcortical parts like the thalamus, limbic system, and reticular advancement of the frontal cortex for the time of contemplations, memory, and data.

CONCLUSION

Alochaka Pitta is a subtype of Pitta which is obligated to sight and thinking process. Alochaka Pitta engages us to see things, see and assess them. Drishti or vision is the seat of Alochaka Pitta. Drishti suggests a vision that engages us to see things around us and see them in the right sense. In state-of-the-art science, the shade of the retina for instance rhodopsin and iodopsin can be immovably related to Alochaka Pitta on account of likeness in region and ability of these parts. Alochaka Pitta interprets the visual redesigns of light and assortment, changing over electrical main thrusts into a vision that can be seen and examined by the brain. It processes and ingests information. It has been battled that Alochaka Pitta controls internal as well as external vision. In this academic audit, we accumulated different data from the Ayurvedic show-stoppers with the open investigations, as well as the course books of current clinical sciences, various articles for better appreciation of the possibility of Alochaka pitta and its assessment with contemporary science. Ayurveda is a science considering helpful understandings. When in doubt, pitta is drava (liquid) in nature and drew in with handling, processing, biochemical reactions, and manufactured messengers at each level in the human body. It is a result of its teekshna, ushma, and sara properties. Alochaka pitta is organized in netra. It is liable for roopalochana (impression of vision). In light of reasonable appreciation, the photosensitive manufactured substances in the eye called photopigment and the whole compound cycles drew in with the photochemistry of vision, neurotransmitters related to the visual pathway from the retina to the visual cortex may be tended to as Alochaka pitta. There is a need for extra investigation to evaluate comprehensively any leftover doshas.

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