

**RELATIONSHIP BETWEEN DAIHIK PRAKRITI AND DRY EYE DISEASE IN OFFICE WORKERS – A PILOT STUDY****Priya Jain<sup>1\*</sup>, Shuchi Dubey<sup>2</sup>, Rajeev Mishra<sup>3</sup>, Hemlata Jain<sup>4</sup> and Shweta Agrawal<sup>5</sup>**<sup>1</sup>PG Scholar M.D. (Ayu), PG Department of Kriya Sharir, Pt Khushilal Sharma Government (Autonomous) Ayurveda College and Institute, Bhopal, MP.<sup>2</sup>Associate Professor M.D. (Ayu), PG Department of Kriya Sharir, Pt Khushilal Sharma Government (Autonomous) Ayurveda College and Institute, Bhopal, MP.<sup>3</sup>Assistant Professor M.D. (Ayu), PG Department of Kriya Sharir, Pt Khushilal Sharma Government (Autonomous) Ayurveda College and Institute, Bhopal, MP.<sup>4,5</sup>Assistant Professor M.S. (Ayu), Department of Shalaky Tantra, Pt Khushilal Sharma Government (Autonomous) Ayurveda College and Institute, Bhopal, MP.**\*Corresponding Author: Dr. Priya Jain**

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**ABSTRACT**

Eyes are the windows to the soul. Ayurvedic classical texts have mentioned about eye as Netra. Netra is a most important sense organ in our body. It is the place for Chakshu Indriya which serves the function of Rupa Grahana i.e. perception of vision. In present scenario most of the people use visual devices in daily routine, that is known as visual display terminal (VDT). Over use of Video Display Terminals (V.D.T) like Computer, Mobiles, and Television & faulty lifestyle are some of the causes. Among these disorders, many are related to Indriya (Sensory Organ) especially Cakshurindriya (Eye). In metro city, more than 50% cases from ophthalmic OPD are of Dry Eye Syndrome. Dry eye syndrome is a disorder similar to Sushkaksipaka mentioned in ayurvedic texts. One In Ayurveda different disease depends on Prakriti. Prakriti is a unique concept in Ayurveda, emphasizing individuality and the predisposition to specific diseases, as well as their origin, prognosis, and management. It encompasses the internal and external characteristics of the body. Prakriti can be defined as an individual's innate state. Dry eyes have a significant impact on work productivity, with the most pronounced effect among office workers. So with the aim to enhance the awareness of its effect on work productivity among the work force.

**KEYWORD:-** Dry Eye Syndrome, *Sushkaksipaka*, *Prakriti*.**INTRODUCTION**

*Netra* is a most important sense organ in our body. Acharya Shusruta describing the importance of *netra* in *Shalakhya Tantra* has said that "sarva indriyam nayanam pradhanam". Eyes are a precious gift bestowed by divinity, a boon to behold the splendor of the world. They are the most fragile organ in the human body, necessitating specialized care. The contemporary lifestyle, coupled with the proliferation of modern appliances and devices such as televisions and computers (Gadgets).<sup>[6]</sup> These devices exert a profound influence on lives today, we cannot avoid because these devices have become a part of our life. Across all demographics, from lower to upper classes, people of all ages regularly utilize these devices. With their advanced features, gadgets serve to streamline tasks, occupy leisure time, and initially functioned as means of communication, gaming, scheduling, watching movies, and staying informed with current events. Gadgets have become so ingrained in daily life that their potential impact on our health is often

overlooked.<sup>[7]</sup> Consequently, due to these lifestyle changes and technological aids, Dry Eye Disease has emerged as a prevalent issue in the present scenario. Dry eyes have a significant impact on work productivity, with the most pronounced effect among office workers. So with the aim to enhance the awareness of its effect on work productivity among the work force.<sup>[8]</sup> *Shushkaksipaka* is one among the *sarvagat netra rogas* mentioned by Acharya Shusruta (*vata*) in which *kuditam*, *darunaruksnavartma*, *chavildarshan*, Acharya Vagbhat have also classified *shushkaksipaka* under *sarvagatanetra rogas*, caused due to affliction of *pitta dosha* having symptoms of *gharsha* (Foreign body sensation), *Toda* (Pricking pain), *Bheda* (Pain) *updeha* (Stingy mucous discharge), *Krichronmeelanimeelana* (Difficult in opening and closing eyelids) *vishushkata* (Dryness), *rookshadarunavartmakshi* (Dry painful eyes).<sup>[20]</sup> *Prakriti* is a unique concept in Ayurveda, emphasizing individuality and the predisposition to specific diseases, as well as their origin, prognosis, and

management. It encompasses the internal and external characteristics of the body. Prakriti can be defined as an individual's innate state, determined by their genetic makeup. According to Ayurveda, each person possesses a fixed Prakriti established at conception when the sperm and ovum unite in the womb. The predominance of Vata, Pitta, and Kapha Doshas in one's constitution defines their Prakriti. Thus, Prakriti encompasses genetically determined anatomical, physiological, and psychological traits, influencing how one responds to environmental factors, medications, and disease susceptibility. This concept of Prakriti forms the basis of preventive and personalized medicine. The eyes of vata Pradhan prakriti person will be distinguished vrutta netra (Round eyes) krishnavarna netra (blackish eyes) Achurni (Non attractive) the eyes of the pitta prakriti person will be characterized by tarun netra (Slender eyes), tamra nayana (Coppery eyes), madhu pinga netra (Reddish brown eyes) tanualpakshama (Thin and scanty eyelashes) The eyes of a kapha prakriti person can be easily differentiated with shuklaksha (White eyes) suvaktak (clear and prominent eyes) vishala (Wide eyes) deerga (Protracted eyes) Asita pakshma (Dark eye lashes) individual has decided at the time of conception, and it remains constant till death. So we can here try to establish by this pilot study to determine the relationship between dry eye syndrome in office workers and prakarati, it is helpful to prevent dry eye syndrome.

### AIM AND OBJECTIVE

To study the relationship between daihik prakriti and dry eye disease in office workers.

### Criteria for assessment

#### Subjective parameters

Grading	0	1	2	3
Feeling of dryness in eyes	Never	Occasionally feeling of dryness occurs on exposure to precipitating factors	Frequent feeling of dryness but not require medication	Constant feeling of dryness require medication
Foreign body sensation in eyes	Never	Occurs occasionally	Occurs frequently but does not disturb routine work	Occurs constantly, require medication
Blurred vision	Never	Occasionally transient blurring of vision	Frequent blurring of vision, not require intervention	Blurring of vision require intervention.
Burning sensation	Never	Burning sensation Occurs occasionally	Occurs frequently but does not disturb routine work	Occurs continuously disturb routine work
Redness of eyes	No pain	Mild pain (occasionally)	Moderate pain (does not disturb routine work)	Severe pain (disturb routine work)
Stickiness of eyelids	No itching	Occasional itching	Frequent itching	Continuous itching

#### Objective parameter

Severity	Schirmer score	Flourescein corneal staining
Mild	10-15mm	Mild
Moderate	5-10mm	Variable
severe	0-5mm	Marked centre

### MATERIAL AND METHODS

10 patients newly diagnosed with dry eye syndrome were registered for the study from the OPD and IPD of Pt Khushilal Sharma Ayurved College & Hospital, Bhopal, Madhya Pradesh, India. Informed consent was obtained from the patients before starting the intervention.

#### Inclusion criteria

1. Diagnosed cases of Dry eye.
2. Age group 26-60 years of either sex working on screen for minimum four hours in their respected offices
3. Patient willing to give written consent for participation in the proposed Research work.

#### Exclusion criteria

1. Dry eye caused by any Complicated cases like acute/chronic/infective conjunctivitis, corneal disorders, dacryocystitis, Sjogren syndrome and other autoimmune or chronic systemic disorders or any other which may Jeopardize the result of the study were excluded.
2. Pregnant and Lactating women.

#### Criteria for diagnosis

- Participants having signs and symptoms of Dry eye disease.
- Assessment of Dry eye disease through Schirmer's tear test strip and fluorescein corneal staining.

**Patient wise Observation and Result****Dosha Pradhanta wise Prakriti distribution**

<b>Prakriti</b>	<b>N. of patients</b>	<b>Percentage</b>
<i>Vata Pradhan</i>	06	60%
<i>Pitta Pradhan</i>	03	30%
<i>Kapha Pradhan</i>	01	10%

**Associate dosh wise sub division**

<b>Prakriti</b>		<b>n. of patients</b>	<b>Percentage</b>
<i>Vata Pradhan</i>	Vata Pittaja (VP)	5	50 %
	Vata Kaphaja (VK)	1	10%
<i>Pitta Pradhan</i>	Pitta Vataja (PV)	2	20%
	Pitta kaphaja (PK)	1	10 %
<i>Kapha Pradhan</i>	Kapha Vataja (KV)	01	10%
	Kapha pittaja (KP)	0	0

**Severity level wise prakriti distribution**

<b>Severity</b>	<b>Vata</b>	<b>Pitta</b>	<b>Kapha</b>	<b>Total</b>
Mild	01	01	00	02
Moderate	02	01	00	03
Severe	03	02	00	05
<b>Total</b>	<b>06</b>	<b>03</b>	<b>01</b>	<b>10</b>

**Mild**

<b>Prakriti</b>		<b>n. of patients</b>	<b>Percentage</b>
Vata Pradhan	Vata Pittaja (VP)	01	10 %
	Vata Kaphaja (VK)	00	10 %
Pitta Pradhan	Pitta Vataja (PV)	01	10 %
	Pitta kaphaja (PK)	00	00%
Kapha Pradhan	Kapha Vataja (KV)	00	00%
	Kapha pittaja (KP)	00	00%

**Moderate**

<b>Prakriti</b>		<b>n. of patients</b>	<b>Percentage</b>
Vata Pradhan	Vata Pittaja (VP)	02	20%
	Vata Kaphaja (VK)	00	00%
Pitta Pradhan	Pitta Vataja (PV)	01	10%
	Pitta kaphaja (PK)	01	10%
Kapha Pradhan	Kapha Vataja (KV)	00	00%
	Kapha pittaja (KP)	00	00%

**Severe**

<b>Prakriti</b>		<b>n. of patients</b>	<b>Percentage</b>
Vata Pradhan	Vata Pittaja (VP)	02	20%
	Vata Kaphaja (VK)	01	10%
Pitta Pradhan	Pitta Vataja (PV)	01	10%
	Pitta kaphaja (PK)	01	10%
Kapha Pradhan	Kapha Vataja (KV)	00	00%
	Kapha pittaja (KP)	00	00%

**Working hours per day on screen, wise prakriti distribution**

<b>Working hours</b>	<b>Vata Pradhan</b>	<b>Pitta Pradhan</b>	<b>Kapha Pradhan</b>	<b>Total</b>
4-6 hrs	01	00	00	01
6-8 hrs	02	01	00	03
more than 8 hrs	03	02	01	06

**Working duration on screen 4-6 hrs per day wise prakriti sub division**

Prakriti		No. of patients	Percentage
Vata Pradhan	Vata Pittaja (VP)	02	20%
	Vata Kaphaja (VK)	01	10%
Pitta Pradhan	Pitta Vataja (PV)	01	10%
	Pitta kaphaja (PK)	01	10%
Kapha Pradhan	Kapha Vataja (KV)	01	10%
	Kapha pittaja (KP)	00	00%

**Working duration on screen 6-8 hrs per day wise Prakriti sub division**

Prakriti		No. of patients	Percentage
Vata Pradhan	Vata Pittaja (VP)	01	10%
	Vata Kaphaja (VK)	00	00%
Pitta Pradhan	Pitta Vataja (PV)	00	00%
	Pitta kaphaja (PK)	00	00%
Kapha Pradhan	Kapha Vataja (KV)	00	00%
	Kapha pittaja (KP)	00	00%

**Working duration on screen more than 8 hrs per day wise Prakriti sub division**

Prakriti		No. of patients	Percentage
Vata Pradhan	Vata Pittaja (VP)	02	20%
	Vata Kaphaja (VK)	00	00%
Pitta Pradhan	Pitta Vataja (PV)	01	10%
	Pitta kaphaja (PK)	00	00%
Kapha Pradhan	Kapha Vataja (KV)	00	00%
	Kapha pittaja (KP)	00	00%

**Working duration on screen (in years) wise Prakriti distribution**

Working years	Vata pradhan	Pitta pradhan	Kapha pradhan	Total
<5 years	01	00	00	01
6-10 years	02	01	00	03
> 10 years	03	02	01	06

**Working duration on screen (< 5 years) wise Prakriti sub division**

Prakriti		No. of patients	Percentage
Vata Pradhan	Vata Pittaja (VP)	02	20%
	Vata Kaphaja (VK)	00	00%
Pitta Pradhan	Pitta Vataja (PV)	00	00%
	Pitta kaphaja (PK)	00	00%
Kapha Pradhan	Kapha Vataja (KV)	00	00%
	Kapha pittaja (KP)	00	00%

**Working duration on screen (6-10 years) wise Prakriti sub division**

Prakriti		No. of patients	Percentage
Vata Pradhan	Vata Pittaja (VP)	02	20%
	Vata Kaphaja (VK)	00	00%
Pitta Pradhan	Pitta Vataja (PV)	01	10%
	Pitta kaphaja (PK)	00	00%
Kapha radhan	Kapha Vataja (KV)	00	00%
	Kapha pittaja (KP)	00	00%

**Working duration on screen (> 10 years) wise Prakriti sub division (n=26)**

Prakriti		No. of patients	Percentage
Vata Pradhan	Vata Pittaja (VP)	02	20%
	Vata Kaphaja (VK)	01	10%
Pitta Pradhan	Pitta Vataja (PV)	01	10%
	Pitta kaphaja (PK)	00	00%
Kapha	Kapha Vataja (KV)	01	10%

Pradhan	Kapha pittaja (KP)	00	00%
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**Subjective parameters**

Patient	Age	Sex	Feeling of dryness in eyes	Foreign body sensation in eyes	Blurred vision	Burning sensation	Eye ache	Itching in eyes	Heaviness in lids	Reness of eyes	Stickiness of eyelids
1	24	M	+	+	+	+	+	-	+	+	+
2	56	M	+	+	-	-	-	+	+	-	+
3	26	F	+	+	+	+	+	+	+	+	+
4	23	F	+	-	-	-	-	-	+	-	+
5	27	M	+	+	+	+	+	+	+	+	+
6	30	M	+	+	-	+	-	+	+	+	+
7	26	F	+	+	-	+	-	+	+	+	+
8	26	F	+	-	+	+	+	+	+	-	+
9	32	M	+	+	+	+	+	+	-	+	+
10	31	M	+	+	+	-	+	+	+	+	+

**Objective parameter**

Patient	Age	Sex	Severity	Schirmer	Flourescein corneal staining
1	24	M	Moderate	5-10 mm/5min	Variable
2	56	M	Severe	0-5 mm/5min	Marked central
3	26	F	Moderate	5-10 mm/5min	Variable
4	23	F	Mild	10-15mm/5min	Mild
5	27	M	Moderate	5-10 mm/5min	Variable
6	30	M	Moderate	5-10 mm/5min	Variable
7	26	F	Moderate	5-10 mm/5min	Variable
8	26	F	Mild	10-15mm/5min	Mild
9	32	M	Severe	0-5 mm/5min	Marked central
10	31	M	Severe	0-5 mm/5min	Marked central

**DISCUSSION**

Dry Eye Syndrome is linked to various factors, such as *Prakriti* of patients, working hrs of patients etc. poor dietary habits, and an unhealthy lifestyle. *Suskaksipaka* i.e. Dry Eye Syndrome there is dryness in eyes due to increase in Vāta-Paitta-dosaprakopa, 60 percentage or 6 patient of dry eye syndrome having vata dominant prakriti, out of vata dominant prakriti 50 % have vata pittaj and 10 % having vata kaphaja prakriti, it is due to ruksha guna of vayu.

Out of 10 patients 05 patient/50 % having severe category, 3 patient/30% having moderate and 2 patient /20 % having mild severity, it indicates vata and pitta prakriti are more prone to dry syndrome. In the case of working hours Out of 10 patients 06 patient/60 % suffering from dry eye syndrome those who working more than 8 hrs/day, 3 patient/30% suffering from dry eye syndrome those who working 6- 8 hrs/day and 1 patient /10 % suffering from dry eye syndrome those who working 4-6 hrs/day, it indicates that those working person work more hrs they suffering from dry eye syndrome due to more working hours vitiated vata dosha. Same result found in those patients working more years on screen i.e. working years Out of 10 patients 06 patient/60 % suffering from dry eye syndrome those who working more than 10 years, 3 patient/30% suffering from dry eye syndrome those who working 6- 10 years and 1 patient

/10 % suffering from dry eye syndrome those who working less than 6 years, it indicates that those working person work more hrs on screen they suffering from dry eye syndrome.

It indicated vata and pitta prakriti are more prone to dry syndrome. Vitiated Vata and Pitta reach upto Netra by the Śira. At Netra they vitiated Rakta dhatu to form *Suskaksipaka*, which results in the scanty Asru.

**CONCLUSION**

In Ayurveda the netra is the Pradhan Indriya of human body that works till death. If eye not working human become blind and unable to see outer world. So we can say eye is the main sense organ gifted by God to human beings. An individual who is blind, day and night are the same and this beautiful world is of no use to him even if he possesses a lot of wealth, so sincere efforts should be made by every individual to preserve his/her vision till the last breath of life. In this pilot study dry eye syndrome are more found in Vata-Pitta prakriti and those person more working on screen like computer mobile etc. In the present scenario we understand of the disease Dry Eye Syndrome and planning the treatment protocol accordingly; has proved much effective than the prevailing management modalities.

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