

CASE STUDY

# Effect of *Trataka* and *Goghrita Aschotana* in Computer Vision Syndrome (*Shushkakshipaka*): A Case Study

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## ABSTRACT

Computer Vision Syndrome arises now days due to long time and improper working on computer. Computer Vision Syndrome has symptoms like Headache, Dryness of Eyes, Eye Fatigue, Redness, Burning in the Eyes and Itching in Eyes. In Ayurveda *Shushkakshipaka* have these symptoms same as Computer Vision Syndrome. The main aim of our study is to manage these diseases with Ayurveda which will cure the disease from its root cause without any side effects. So, the effort has been made using *Trataka* a Yoga kriya and *Goghrit Aschotana* in the management of Computer Vision Syndrome. A male patient of Age 42 years with history of Computer Vision Syndrome from last one year. The Patient have all classical symptoms like Headache, Dryness of Eyes, Eye Fatigue, Redness, Burning in the Eyes and Itching in Eyes comes at O.P.D of Govt. Ayurvedic Hospital Model Gram Ludhiana. The testing of dryness of both eyes was done with Schirmers Test and found R.E has 8mm wetting in 5 min and L.E has 9 mm wetting in 5 min. Patient was using Tear plus eye drops and also taking antihistamine drugs daily from last nine months. So, this case of Computer Vision Syndrome is treated with *Trataka* a Yogic Kriya daily in the early morning followed by *Aschotana* of *Goghrita* for four weeks. It was observed patient got good relief in the all symptoms of Computer Vision Syndrome.

**Key Words** *Computer vision syndrome, Shushkakshipaka, Goghita, Trataka, Aschotana*

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## INTRODUCTION

Computer Vision Syndrome has been described as the number one occupational hazard of 21<sup>st</sup> century, It affects 90% of the people who spent three hours or more a day on a computer which reduces the blinking rate of a person that causes dryness in eyes .The main ocular symptoms reported are dryness of eyes, eye strain, watering, headache, irritation, redness in eyes, blurred

vision and diminished vision. Computer vision syndrome is somewhat related to the *Shushkakhsipaka* in Ayurveda. In *Shushkakhsipaka* Vata Dosa is considered as prime factor so *shushkata*. Hence treatment must be strictly aimed to arrest the vitiated Vata Doṣa in the eyes. *Aschotana* is one of the *Kriyakalpas* described in Ayurveda which is the simplest and most convenient method of topical application.

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Goghrita is vattapitta ghana, Chakshushya and having properties of snigdha guna and is easily available. Trataka a yogic Kriya in which we have to focus constantly at a chosen steady object, When the steady gazing is done on an external object, it is known as bahir Trataka and when it is done on an internal object, it is known as antar Trataka and when both processes are alternatively done, it is called as bahya-antar drishti Trataka. Hatayogapradipika states that by regular practice of Trataka one can get rid of all types of netra roga, it also provides a refreshment feeling by removing lethargy, fatigue, and tiredness. Trataka is an yogic practices help to reduce eyestrain and increase the stamina of eye muscle. Eye Muscles are fatigue due to constant staring at computer screen. so, present study has been designed which was to evaluate the efficacy of Trataka and Goghrita Aschotana in the treatment of Computer Vision Syndrome.

## MATERIALS AND METHODS

**Source of Data:** Patient suffering from symptoms of Computer Vision Syndrome was selected from O.P.D of Govt. Ayurvedic Hospital model gram Ludhiana, Punjab.

**Study Design:** A single case study

**Duration of study:** Total duration 28 days, Trataka was done daily in the early morning and Goghrita Aschotana was also done after the Trataka for four weeks.

## A CASE REPORT

A male patient of age 42 years was selected having classical symptoms of Computer Vision Syndrome like Headache, Dryness of Eyes, Eye Fatigue, Redness, Burning in the Eyes and Itching in Eyes.

**History of present illness :** Patient was apparently well before 1 year, Patient had joined as a computer operator job where he had to work more than five hours a day in front of computer. Patient starts feeling symptoms like Headache, Dryness of Eyes, Eye Fatigue, Redness, Burning in the Eyes and Itching in Eyes. Patient had taken initially some home remedies and get mild relief but with time condition was getting worsened.

**History of Treatment:** He was taking treatment from Eye Specialist at Ludhiana who had given refresh tears drops as lubricant for eyes and antihistamine drug to the patient. Patient had taken many homeopathy and allopathic medications but could not get relief. There is no history of Diabetes mellitus, Hypertension, Epilepsy, Tuberculosis, Anemia etc.

### Personal History

**Occupation:** Computer operator

**Addiction:** No H/o Smoking, Tobacco Chewing, Alcohol etc.

**Ahar:** Mostly irregular diet, Oily, Spicy, Fast food.

**Family History:** His father had history of cataract)

### Ashtavidh Pariksha :

**Nadi :** Vat kaphaj **Mutra :** Sam, **Mala :** Sam

**Jivha:** Sam **Shabda:** krichhat bhashitama

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**Sparsha** ;Khara , **Druka:** Prakritika ,**Akruti:** Sthula

### Examination

#### Systemic Examination

**RS:** On auscultation air entry was equal in both lungs

Respiration Rate -20/min

**CVS:** No e/o any murmur sound

B.P 130/80 mm of Hg, Pulse -76/min

**CNS:** Conscious well oriented to Time, Place and Person .

**P/A:** Soft, No tenderness, No Organomegaly.

#### Lab Investigations:

**Blood:** TLC -5000mm<sup>3</sup>, DLC – N 70%,L 25%,E 5% B 0%, Hb% - 13.5 gm, ESR-15mm in 1<sup>st</sup> Hour.

**Schirmers Test :** R.E : 8mm in 5 min and L.E : 9 mm in 5 min

#### Procedure of Trataka:

**Time:** The best time to do the practice is early in the morning and before Sunrise.

**Posture:** The person has to sit in a comfortable meditative posture where the back is held upright like Vajrasana , Sukhasana etc.

#### Procedure of Trataka:

A burning Deepak was taken on a stand so that its flame was at the level of the eyes and it had placed at the arm's length distance away from the body. Eyes had been closed and then witnessed the stillness of the body for some time.

**Bahir Trataka:** Eyes were opened and focused the gaze on the flame and wicker without blinking the eyes. Resisted the urge to blink of eyes as long as possible. Gradually build the ability of

the eyes to stay focused without flickering for up to 2 to 3 minutes .Due to continued focusing steadily for long time tears had been came's out from eyes, at this stage eyes were closed and relaxed.

**Antar Trataka:** With eyes closed, observed the after-image of the flame appeared in the internal space, When the image was fades away, eyes were opened and continued with the second round of Bahir Trataka followed by Antar Trataka. Continued a few more rounds of Bahya-Antar drishti Trataka. Practice was ended with palming the eyes)

#### Procedure of Goghrita Aschotana :

**Materials:** Standard prepared Goghrita was autoclaved for 30 min filled in 10 ml glass bottle.

#### Procedure:

Patient had been taken on supine position, the doctor had to open the eyes of the patient with his left hand and had to put the 4 drops of Goghrita with his right hand from 2 Anguli (inch) height. It had been be kept in the eyes for 100 Matra kalas and then eyes had been cleaned with lukewarm water. Patient was advised not to see the bright objects. The Patient was shown the above procedure and told to perform it at home. For liquefaction of Ghrita the patient was advised to put ghrita bottle in hot water for some time)

#### Treatment

**Follow up:** Duration of treatment was 28 days and Follow up was done on 0<sup>th</sup> day, 7<sup>th</sup> day,14<sup>th</sup> day, 21<sup>st</sup> day and 28<sup>th</sup> day.

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Trataka was done daily in the early morning for four weeks and Goghrita Aschotana was also done after the Trataka for four weeks.

**Criteria for Assessment of Results:** Assessment done before and after treatment and which significant improvement was noted (Table1).

**Table no 1: Criteria for Assessment of results**

Sr No	Parameters	G0	G1	G2	G3
1	Headache	No Headache	Mild Occasionally Headache	Moderate Irregular Headache	Severe Regular Headache
2	Dryness of Eyes (Schirmers Test )	No Dryness	Mild 10-15mm wetness	Moderate 5-10mm wetting	Severe Less than 5mm wetting
3	Eye Fatigue	No Fatigue	Mild After 4-6 hours of near work	Moderate After 2-4 hours of near work	Severe After 2 hours of near work
4	Redness	Normal	Mild After 4-6 hours of near work	Moderate After 2-4 hours of near work	Severe After 2 hours of near work
5	Burning Sensation	No Burning	In continues Tolerable	Continues Tolerable	Continues In Tolerable
6	Itching	No Itching	Occasionally present	Frequently present	Severe Itching all the time

### DISCUSSION

Computer Vision Syndrome is becoming a major public health issue. Nearly 60 millions people suffer from CVS globally. Visual work on computer is demanding and includes frequent eye movement, continuous focusing and alignment demands which involve continuous relaxation and contraction of the eye muscle<sup>9</sup>, this frequent focusing and refocusing of the eye by the ciliary body creates fatigue to the eye and cause accommodative symptoms related to Computer Vision Syndrome<sup>8</sup>. Symptoms of computer vision syndrome are dry eyes, eyes strain, and blurred vision, red eyes, burning sensation, double vision and headache<sup>10,1</sup>. Computer Vision Syndrome has no direct reference in Ayurvedic classics but it may be correlate with Shushkakshipaka. Acharya Vagbhata defines Shushkakshipaka is due to

vitiated Vata and Pitta doshas<sup>2</sup>. The signs and symptoms of Shushkakshipaka can be a frame of picture of Computer Vision Syndrome. . Eye Muscles were fatigued due to constant staring at computer screen. Trataka is a yogic practices help to reduce eyestrain and increase the stamina of eye muscle. Trataka improve the ability to make visual adjustments and help to stimulate as well as relax the eye muscles. *Trataka Kriya* also increases imagination power and efficiency of extra ocular and intraocular by forcing them to work and enhances the metabolism of rods and cones through the mechanism of dark and light adaptation. Computer is a heat factory, so excessive use of computer increases Pittadosha in netra. Aschotana with Goghrita is one of the Kriyakalpas described in Ayurveda which is the simplest and most convenient method of topical application. Goghrita has Pitta & Vata pacifying

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properties, so it causes reduction in Burning sensation, Headache & Redness of eyes. Lipid layer of the tear film gets disturbed due to excessive dryness of the eyes. Goghrita has Lipophilic action which strengthens lipid layer of tear film so reduces Dryness in the eyes. Goghrita also has lubricating properties which was very useful in reducing dryness and burning sensation in computer vision syndrome<sup>1</sup>. Chakshushya property of Goghrita gives Strength to Ocular muscles, It results in development of pupillary reflex and good convergence mechanism because of this patient get relief from Eyes fatigue & headache.

**Table 2** Outcome of results in computer vision syndrome

Sr no	Parameters	Before Treatment	After Treatment
1	Headache	2	0
2	Dryness of Eyes	2	1
3	Eye Fatigue	2	0
4	Redness	2	1
5	Burning Sensation	2	0
6	Itching	1	0

CVS is treated with Trataka a Yogic Kriya daily in the early morning followed by Aschotana of Goghrita for four weeks. It was observed in the case, that patient get improvement in all its parameters. Total score before treatment is 15 and after treatment of four weeks score is 2, so there is an significant improvement in all Parameters<sup>2</sup>. During the course of treatment there was no complication appeared.

### CONCLUSION

There were many treatment modalities for Computer Vision Syndrome (Shushkakshipaka) Here an effort was made to show the effect of

Trataka as Yoga Kriya and Goghrit Aschotana on Computer Vision Syndrome . In this case it is proved that Trataka followed by Ashchotana is an good line of treatment in Computer Vision Syndrome (Table 2).

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