ROLE OF TARPANA KRIYA KALPA WITH TRIPHALA GHrita IN THE TREATMENT OF COMPUTER VISION SYNDROME, A WIDESPREAD EYE COMPLAINT OF PRESENT SCENARIO

Richa Mohan*
Rajiv Gandhi Government Post Graduate Ayurvedic College, Paprola, Distt: Kangra H.P 176115, India
Received 09-09-2013; Revised 08-10-2013; Accepted 30-10-2013
*Corresponding Author: Dr. Richa Mohan
Rajiv Gandhi Government Post Graduate Ayurvedic College, Paprola, Distt: Kangra H.P 176115, India
Richa.ria2@gmail.com, Tel: 09736333669

ABSTRACT

Today in 21st century, we are living in a highly sophisticated environment. Computer is one of the most developed technologies which are used in present time by the children, the young and the old. More and more men are sitting in front of computer for longer and longer hours. Because computer is such a highly visually demanding task, but the eyes are still structured according to old hunting days and are unable to adjust themselves, which lead to discomfort coined as Computer Vision Syndrome- An emerging pandemic of 21st century. Modern medicine doesn’t have any definite treatment for the particular problem hence the ayurvedic scholars take it as a challenge to cure it by our various therapies like tarpana, etc. Ashtang Hridya Uttarak Sthan (13/11) has the reference of Triphala Ghrita which is used in the present study in the Kriya kalpa procedure called Tarpana, a local eye refreshing and nourishing therapy.

Keywords: Computer: modern daily used instrument, Computer Vision Syndrome: 21st century ocular as well as systemic disease, Kriyakalpa: local ocular therapies, Tarpana: one of the important kriya kalp of eye, Triphala Ghrita: rasayana, chakshushya, balya

INTRODUCTION

The remarkable strides achieved by man during the days of evolution and his phenomenal growth in unfolding the mysteries of nature relied greatly on his capacity to react to the environment.

- He succeeded in mastering entire animal world due to his fully evolved senses; among them Eyes share a greater role than the rest.
- As eyes are the gateways of external world, visual defects tantamount to the obliteration of the world. It is no wonder that a text as old as Atharva Veda exclaims, “May Surya, the Sovereign Lord of eyes protect me”
- The eyes are said to be most important than all other Indriyas. They are considered as the reflectors of the mind.
- Eyes are the most precisely developed portions of the brain seen outside the skull.
- With the march of time, most of the dietary habits, social structure, life-style and environment have been changing.
- Computer is one of the most developed technologies which are used in present time by the children, the young and the old. The human vision system is not designed for long hours of computer viewing. So these lifestyles changes lead to discomfort called Computer Vision Syndrome (CVS).
- It is a complex of eye and vision problems related to near work which are experienced during or related to computer use.
- It is a repetitive strain disorder that appears to be growing rapidly. Some studies estimate that 90% of US workforce using computer for more than 3 hours per day experience CVS in some form. CVS is not a single disease entity but it is a group of symptoms mainly of
  - Eye strain
  - Dry eye
  - Blurred vision
  - Headache
  - No remedial measures for cure of this pathology prevail in the domain of modern medicine.
So this is a challenge to ayurvedic scholars as we believe nature provides the disease and drug both, by virtue of which we can cure the symptoms of CVS to a large extent.

- A clinical study on the effect of Tarpana Karma with trial drug was done comparing it with the effects of counseling of the preventive measures.
- Modern scientific approach was applied for diagnosis of disease, and assessment of results while working within the parameters of original text.
- Acharya Charak in Charak Samhita has clearly given guidelines for identification as well as treatment of the diseases.
- Diseases, not mentioned in the text and if the name of the disease is not known do not mean that it cannot be cured (Ch. Sa. Su. 18/44-47).
- A systemic approach with regards to etiology (Doshas), site (Dushya/Adhishthan) and Lingam (Clinical features) will lead a physician to permanent cure of the disease.
- CVS is a Vata dominating Pittaja ocular as well as a systemic problem and it can be named "SANGANAKA ATIYOGAJANYA NETRA SAMALAKSHANA".
- Acharya Charak said that to understand a disease one should go through Nidana Panchaka. So to understand the symptomatology of CVS probable nidan panchaka will be discussed here.

- **Nidana**
  - r= f=fo/kfodYia f=fo/keso deZ çKkijk/k bfr O;oL;sr~A ¼
  - Extensive computer work without thinking about eye capability and body stamina and not taking appropriate precautions while working on computer.

- **Pragyaapradha**
  - bfr f=fo/kfoldYia f=fo/keso deZ çKkijk/k bfr O;oL;sr~A
  - Eye strain – A patient of CVS may have heaviness in eyes because of eye fatigue.

- **Parinaam**
  - dky% iqu% ifj.kke mP;rsA (Ch. S. Ni. 1/7)
  - In CVS cause of different symptoms is due to excessive working on computer.

- **Poornvaroopa**
  - r=kfoya llajEHkeJqd.Mwingsgor~ A
  - Working more on computer will produce more symptoms mainly decrease of visual acuity of a CVS patient usually deteriorates if preventive measures are not used.
  - So, by above discussion we can say that although computer vision syndrome (CVS) as such not mentioned in Ayurveda but its symptoms are described in various diseases. Most of the symptoms are vata and pitta predominant. So, the line of treatment for CVS should be vata pittahara.

- **Roopa**
  - çknqHkwZry{.ka iqu/Eyaxe~A (Ch. S. Ni. 1/9)
  - As CVS is not mentioned anywhere in Ayurvedic texts but here symptomatology of CVS will be discussed on modern grounds with Ayurvedic references.

- **Eye Strain**
  - Eye strain is a very common feature of CVS. It is due to constant and continued focusing by ciliary muscles, which create fatigue and lead to tired eyes or eye strain.

- **Blurred vision**
  - It occurs due to accommodative spasm of ciliary body.

- **Dry eye**
  - Dry eye in a patient of CVS is due to exposure of cornea to reflected light energy which causes tear film abnormality by early evaporation of tears. This also decreases tear film break up time (T-BUT). In ayurvedic texts dry eye is mentioned in various terms.

- **Headache**
  - Usually headache is due to stress. In ayurvedic text various terms have been used like
  - \( f\bqjks:tk:s\frA (Su. Ut. 6/27) \)
  - Excessive fatigue (Neck/shoulder/Back pain)
  - These symptoms in a patient of CVS are due to constant sitting posture, overuse of muscles of neck/shoulder and fingers. In ayurveda, excessive use of muscle or ativyayama leads to such symptoms. Ativyayama also vitiates vata and pitta which is the cause of neck/shoulder/back and finger pain.

- **UPSHYAYA**
  - mi\% iqugsZrqO;kf/kfojhirkuka foijhirFkZdkfj.kka
  - pkS":k/kkgkjfogkj.kkkeqi;ksx% lq[kkuqcU/k%A (Ch. S. Ni.1/10)
ETIOLOGY

CVS-Definition

The American Optometric Association defines CVS as “the complex of eye and vision problems related to near work that are experienced during or related to computer use.” Sitting at a computer generally causes a person to look straight ahead for long stretches, work in a dry office or home environment, and to blink less often. These factors can lead to vision problems.

ETIOLOGY

• The etiology revolves around pathology
• in accommodation, and
• formation of tear film,

• decreased involuntary blinking and
• up to some extent to visual pathway

ACCOMMODATION

• Definition: As we know that in an emmetropic eye, parallel rays of light coming from infinity are brought to focus on the retina, with accommodation at rest. Our eyes have been provided with a unique mechanism by which we can even focus the diverging rays coming from a near object on the retina in a bid to see clearly. This mechanism is called accommodation.
• Excessive accommodation as in continuous work on VDUs may lead to accommodation spasm which causes the symptoms like image blurr, fatigue, eye strain and headache.

Tear Film

• A preocular layer of tear that is adhered to ocular surface.
• Triple layered structure(Holly and Lamp,1971)
• Intergrated aqueous and mucin gel structure.
• Triple layer structure is useful in defining pathophysiology
• CVS symptoms like dry eye as per seems to be due to evaporative dry eye because working on the VDUs without involuntary blinking leads to evaporation of tears .Thus causing the features of dry eye like FBS (foreign body sensation) and burning sensation etc.

SYMPTOMS

• eyestrain
• headache
• blurred vision
• dry eye
• neck and shoulder pain

These symptoms may be caused by:
• poor lighting
• glare on the computer screen
• improper viewing distances
• poor seating posture
• uncorrected vision problems
• a combination of these factors

SIGNS

• Conjunctiva- Hyperemia
• Tear Film-Decreased tear meniscus/mucin debris
• Cornea-Decreased corneal sheen, Epithelial keratopathy, filaments and mucous plaques(in severe DES)

MANAGEMENT

• Proper body positioning for computer use. This includes lighting conditions, chair comfort, location of reference materials, position of the monitor, and use of rest breaks.
• Location of computer screen Optimally, the computer screen should be 15 to 20 degrees below eye level (about 4 or 5 inches) as measured from the center of the screen and 20 to 28 inches away from the eyes
• Blinking - To minimize your chances of developing dry eye when using a computer, make an effort to blink frequently
• Anti-glare screens - If there is no way to minimize glare from light sources, consider using a screen glare filter.
• Rest breaks - To prevent eyestrain, try to rest your eyes when using the computer for long periods, 20-20-20 Rule.
• Use of artificial tears or contact lens wetting solution:-
Effect of Tarpana Kriya Kalpa: –

• As per the given fundamental regarding ndisease, CVS may be coined as “Sangnak Aiyogajanya Netra Samalakshana”. Tarpana kriya kalpa
• Tarpana is the most revered KriyaKalpa extensively used in Netra practice.
• It nourishes the eyes, improves & strengthens the Drishti Shakti.
• It is a very effective, preventive & curative procedure in Vataja & Pittaja vikaras.
• It is a procedure in which Sneha or Ghrita is poured into a well designed round the eye for a stipulated period.
• Ghrita that is selected for therapy should be warmed by placing the container in hot water.
• This Luke warm Ghrita in liquid state is poured through sterile cotton dipped in Ghrita into the parimandala till the eye lashes level with eye closed.
• Patient is asked to open & close the eye intermittently & steadily for a stipulated period.
• So, Local therapy in the form of Tarpana with Triphala Ghrita has been selected for the clinical trial of management of CVS.

### CONCLUSION

The symptoms and complaints of the patient of CVS clearly indicate the vitiation of Vata and pitta doshas. So a therapy which pacifies these doshas should be advocated to provide relief in the symptoms.

As per the given fundamental regarding naming an unknown disease, CVS may be coined as “Sangnak Aiyogajanya Netra Samalakshana”.

- **Tarpana karma** with Triphala Ghrita is effective in relieving different ocular symptoms.
- Only **Tarpana karma** was less effective in certain feature like headache and blurred vision.

### REFERENCES

5. Baghel M.S: Researches in Ayurveda; (2005), Mridu Ayurvedic Publication and Sales, Jamnagar.
20. Aggarwal Lalit P.: Aggarwal’s principles of optics and refraction

Source of support: Nil, Conflict of interest: None Declared