

STUDY THE EFFICACY OF YASTIMADHU GHRIT TARPANA & ANU TAIL NASYA IN THE TREATMENT OF COMPUTER VISION SYNDROME

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ABSTRACT

Daily computer use is become a part of life. Today we have the luxuries of better software, promise of the internet with online living and tease of a paperless society. But prolonged use of computer lead to variety of problems viz, headache, neck pain, shoulder pain, dry eye and progressive refractive changes. These all affects the daily routine work.

The study is conducted to evaluate the effect of *Yastimadhu ghrif* and *anu tail nasya* in computer vision syndrome. **Method:** Total 60 patients of computer vision syndrome of OPD of *Shalakyatantra* of LRP Ayu. hospital and research centre, Islampur dist – sangli,(MH) were selected randomly and divided into two groups: **Group A:** *Tarpana* and *Nasya*: 30 patients- These volunteers were treated by 2 sittings of *Tarpana* for five days with seven days interval between two sittings. Received *Anutail nasya* 2 drop B.D (*pratimarsh nasya*) **Group B:** 30 patients- Received lubricating CMC eye drop 1 drop Qid

Treatment continued for 21 days for both groups. Results-The clinical study shows *Yastimadhu ghrif Tarpana* and *Anu tail nasya* significantly reduced symptoms of computer vision syndrome as compared to CMC eye drops

Key words: *Yastimadhu Ghrif, Anu Tail, Tarpana ,Nasya, Computer Vision Syndrome*

INTRODUCTION

“Eyes are the windows of soul.”

Over eighty percent of our learning is mediated through our eyes, indicating the important role our vision plays in our daily activities. Vision disturbance is a silent enemy that only appears after a long period of continued stress. Daily computer use is become a part of life. Today we have the luxuries of better software, promise of the internet with online living and tease of a paperless society. People who spend more than two hours on a computer each day will experience symptoms of CVS or Computer Vision Syndrome. The most common symptoms include headache, focusing difficulties, burning eyes, tired eyes, general eyestrain, aching eyes,

dry eyes, double vision, blurred vision, light sensitivity, neck and shoulder pain. Computer vision syndrome and Ayurved – *Ayurvedic* view - How daily use of computer cause the disease?

Though *ayurvedic* classics have no direct reference about computer vision syndrome, we can confirmed its *nidan* and *samprapti* by *Trividha Hetu* i.e.-1) *Asatmendriyarth samyoga Of Dristi*– (incompatible correlation of senses with their objects) *Atiyoga* – long exposure to screen, *Heenyoga* – very small fonts , poorly illuminated room, *Mithya yoga* – constantly staring , not blinking ,2) *Prajnaparadha-* (intellectual error)*Prajnaparadha- dhi, dhriti, smriti , vibhram* unable

to differentiate between good and bad i.e. continuous exposure to screen, though knowing its harmful effects, forget advice for evasion of unhealthy exposure.3) *Parinam* – (time) with respect to chakshurendriya (visual objects) Thus computer users are excessively exposed to UV rays and glare, emitted from computer monitors. These *vata- pittakar nidana* as having speed and are the forms of energy leading to *vata – pitta pradhana tridoshgna* vitiation at *chaksurendriya* then *sthansansraya* of these vitiated doshas occur in *bahya* and second patal of *netra* (consist tear film, conjunctiva, ciliary muscle of the eye) producing the CVS symptoms.

Aims and Objective: To find out the efficacy of *Yastimadhu Ghrit Tarpana & Anu tail nasya* on computer vision syndrome and To compare the efficacy of *Yastimadhu Ghrit Tarpana , Anu tail nasya* and CMC eye drops on computer vision syndrome.

MATERIALS AND METHODS: For this study *Yastimadhu Ghrit ,Anu tail & CMC* drops were taken from GMP approved pharmacy (company).

Selection of Patients: A randomized open labelled, controlled, comparative study was conducted in 60 patients of computer vision syndrome of OPD of *Shalakyatantra* dept. of LRP Ayu. Med. Coll. , Hosp, P. G. Institute and Research Centre, Islampur , Dist- Sangli , Maharashtra.

- Inclusion criteria –
- Patients irrespective of age, sex, education, place of work
- Working with computer from more than 2 years ,
- Daily exposure to computer for more than 6 hrs.,
- Showing more than 3 symptoms of CVS.

- Exclusion criteria –
 - Patients with other ocular and systemic disease
 - Working with computer from less than 2 yrs.
 - Daily exposure to computer for more than 6 hrs.
 - Showing less than 3 symptoms of CVS.
 - Study Design – 60 patients divided into two groups
 - Group A.
 - 30 patients- These volunteers were treated by 2 sitting of *Tarpana* for five days with seven days interval between two sittings. And *pratimarsha nasya* , two times per day i. e. in morning 8 am & in evening 6 pm for total period of 21 days
 - *Tarpana – Yastimadhu Ghrit – 5 Days - 2 sitting with interval of 7 days*
 - *Nasya – Anu tail* Dose – 2 drops per nostril
 - Group B
 - 30 patients of CVS were treated by CMC eye drops for 21 days
 - CMC eye drop – 1 drop in both eyes 4 times a day
 - Treatment continued for 21 days for both groups
 - Study procedure-
 - *Yastimadhu ghrit tarpana* is given at morning for 10 - 15min per day as described in classical text and also all volunteers in Gr. A was advised to perform *pratimarsha nasya* as per procedure mentioned in ayurvedic texts
- Advises after treatment – Percussion on face, forehead and Fomentation on face , forehead, *Gandush* with lukewarm water, Avoid exercise, excess movement, mental disturbance like anger, fear etc. Also, Volunteers should not be allowed to see bright light, take rest for one hour , not be exposed to direct air after treatment.

OBSERVATIONS

Incidence of demographic profile of CVS

Sr. No	Findings	Predominance
1	Age	25 -50 yrs
2	Sex	Male
3	Religion	Hindu
4	Socio –economic status	Middle class
5	Dietary habit	Mixed
6	Prakriti	Vat-pittaj
7	History of ophthalmic illness	No
8	Visual acuity	6/9 – 6/12
9	Work place lighting	Poor
10	Angle of gaze	Above eye level

According to Chi² test result was highly significant at level of significance of 0.05 and degree of freedom (d.f.) 1.

Sr.no	Symptoms	X ² Value	Significant
1	Red eyes	2.42	Equally effective
2	Burning eyes	2.42	Equally effective
3	Dryness/ itching	1.06	Equally effective
4	Eyestrain	1.7	Equally effective
5	Blurred near and distance vision	5.8	Significant
6	Difficulty in focusing	0.64	Equally effective
7	Double vision	2.52	Equally effective
8	Headache	11.36	Highly significant
9	Neck, shoulder pain, bachache	35.6	Highly significant
10	Fatigue	21.68	Highly significant

DISCUSSION

Tarpana: As ayurved texts says , *tarpana* gives strength to eyes i.e it is *dristiprasadak* so used in various diseases and degenerative conditions *Yastimadhu ghrit* is *vata – pittashamak*, *balya* and *rasayan*, *chaksushya* by it's *guna* , *rasa* , *virya* and *vipak*. So it disintegrates the pathology of computer vision syndrome. *Tarpana* is in the form of suspension containing unctuous nature and the particles does not leave the eye as quick as other water based solutions . This increases the tissue contact time and bioavailability hence higher therapeutic concentration can be achieved by *akshi – tarpana* . This

facilitates the action of drug by two ways – 1) by allowing more absorption of the drug by the corneal surface and 2) by exerting direct pressure upon the cornea . Thus it reduces the signs and symptoms of computer vision syndrome .

According to modern pharmacology various drugs used in the eye disease treatment , enters the eyeball by passing through cornea . This penetration depends upon the permeability of the various layers of cornea. The epithelium and endothelium is highly permissible for lipid content as compared to stromal layer. Thus fat soluble drugs readily penetrate these layers , however only water soluble drugs can penetrate the stromal layer. Thus for com-

plete penetration of the drug , It should be lipophilic and hydrophilic .

- *Yastimadhu Ghrit* used for *tarpana* , has got very good penetration through various layers *Nasya* is the procedure in which medicine is applied through the nasal cavity. Nasal cavity , anatomically, leads to the structure of the head and so it is considered as the natural route to the head. So it is easy to apply medicine through this route. When medicine is applied through the nasal cavity and inhaled, it directly spreads to the following parts - Eyes through the nasolacrimal duct ,Middle ear – through the eustacian tube ,Intra cranial spaces –through the middle ear
- Because of these anatomical communications the medicine applied through the nasal cavity reaches all these areas. *Nasya* has direct and sudden action because there is no time delay of digestion of the medicines. The medicine applied is directly absorbed through the mucous lining of the structures. Thus *nasya* cleans the strotas so, daily application of *pratimarsa nasya* will prevent the accumulation of vitiated *kapha* in the strotas of the eye.
- In the *phalaprapti* of *pratimarshya nasya*, *Vagbhatacharya* has mentioned *klamanaasha* i.e. it reduces the fatigue and eye strain , produced by continuous work on computer. It improves the vision and hence can be useful in relieving the symptoms like blurred vision, difficulty in focusing, double vision, and eye strain. (As. Hri. Su. 20/4)
- It also does the *Vatashamana*, hence can be useful in relieving the pain in the neck and shoulder. The *shaman nasya*, decreases the linear venous

congestion, and hence helpful in reducing redness of the eyes. (As. S. Su. 20/ 29, As . Hri. Su. 20/6)

- The daily practice of *Shaman nasya* causes the well developed *skandha* and *griva*, which prevents the neck and shoulder pain. . (As. Hri. Su. 20/4) It is also helpful in the neck stiffness. The *snehana nasya* causes the keenness of sense organs, i.e. improvement in the vision and decreases the symptoms like do blurred vision, difficulty in focusing, double vision, and eye strain. (As. Hri. Su. 20/23)
- The *anu taila nasya* is helpful in the all *urdhvajatrugat rogas*, and it also decreases the *vata and pitta*.
- *Vatashamana*- reduces the symptoms like dry eye, manya and skandha shool.
- *Pittashamana*-reduces the symptoms like burning eyes and redness of eyes of the cornea .Thus it reduces the signs and symptoms of computer vision syndrome .
Nasya – “ *nasa hi sirso dwaram ...*”

CONCLUSION

From all observation and discussion made, it can be concluded that *Yastimadhu Ghrit Tarpana* and *Anu tail nasya* is effective in computer vision syndrome and effect will remain even after treatment without any complications. The result founds are encouraging and can be used routinely in everyday practice for safe recovery. Red eye , Burning eyes , Dryness/ itching, Eye strain , Difficulty in focussing , Double vision, In these sign & symptoms *Tarpana* and *Nasya* is equally effective as CMC EYE drops. *Yastimadhu Ghrit Tarpana & Anu tail nasya* is effective in Blurred vision than CMC Eye drops. *Yastimadhu Ghrit Tarpana & Anu*

tail nasya is very effective than CMC drops in

Headache, Neck/ shoulder pain/ backache, Fatigue. People with Vata pitta pradhan prakriti are prone to Computer vision syndrome.

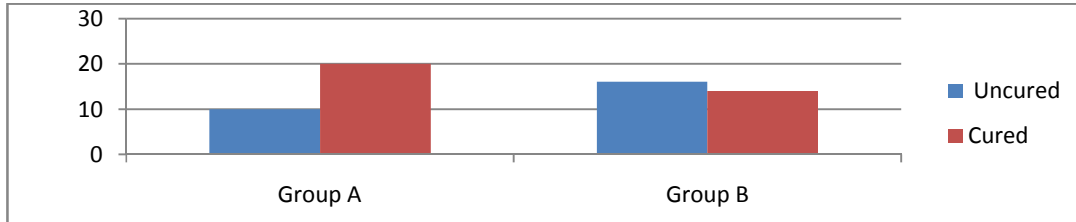
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OBSERVATION TABLES REDNESS OF EYE



Redness of Eye:

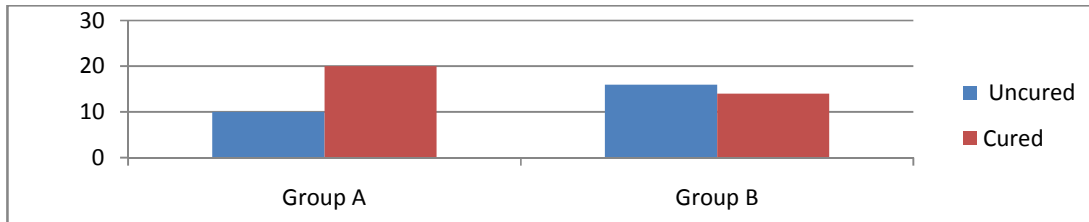
Observed in the all individuals of both group.

Group A : 20 patient were Cured out of 30.

Group B : 14 patient were Cured out of 30.

According to Chi² test result was insignificant at level of significance of 0.05 and degree of freedom (d.f.) 1.

BURNING OF EYE



Burning of Eye

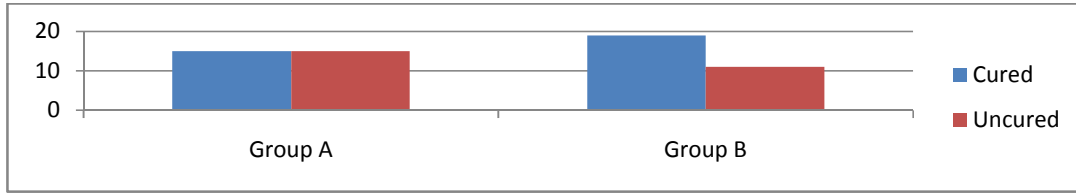
Observed in the all individuals of both group.

Group A : 20 patient were Cured out of 30.

Group B : 14 patient were Cured out of 30.

According to Chi² test result was insignificant at level of significance of 0.05 and degree of freedom (d.f.) 1.

ITCHING AND DRYNESS OF EYE



Itching And Dryness Of Eye

Observed in the all individuals of both group.

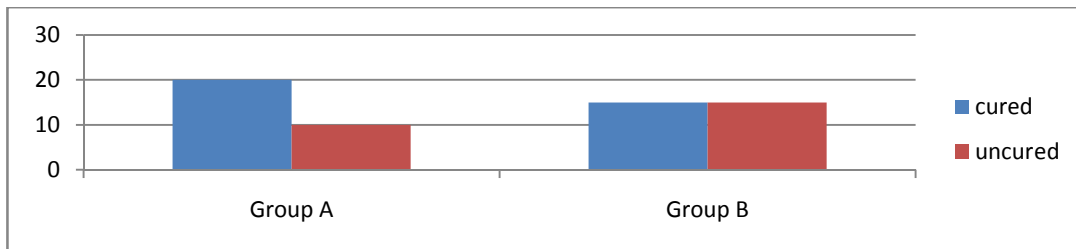
Group A : 15 patient were Cured out of 30.

Group B : 19 patient were Cured out of 30.

Equally effective

According to Chi² test result was insignificant at level of significance of 0.05 and degree of freedom (d.f.) 1.

EYE STRAIN



Eye strain –

Observed in the all individuals of both group.

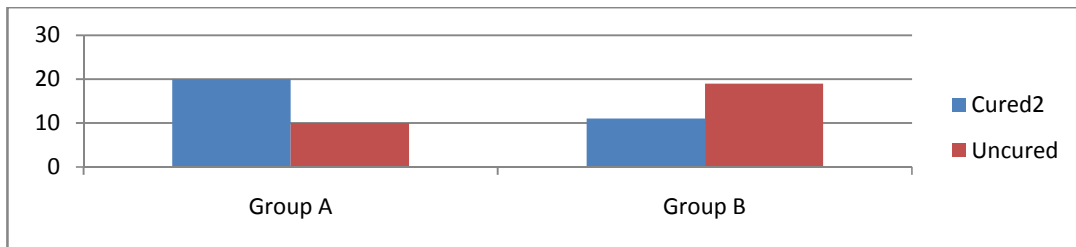
Group A : 20 patient were Cured out of 30.

Group B : 15 patient were Cured out of 30

Equally effective

According to Chi² test result was insignificant at level of significance of 0.05 and degree of freedom (d.f.) 1.

BLURRED VISION:



Blurred Vision-

Observed in the all individuals of both group.

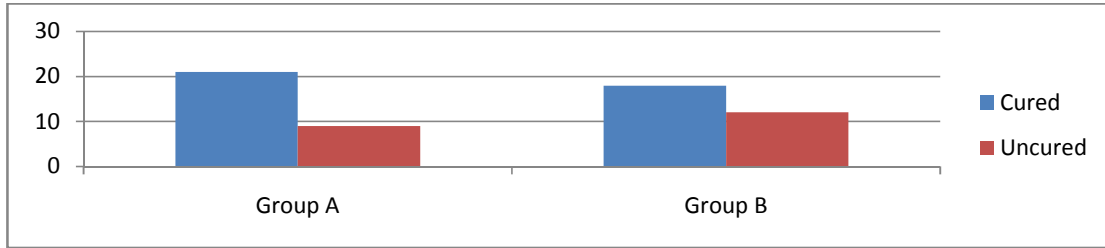
Group A :20 patient were Cured out of 30.

Group B : 11 patient were Cured out of 30

Significant

According to Chi² test result was significant at level of significance of 0.05 and degree of freedom (d.f.) 1.

DIFFICULTY IN FOCUSING:



Difficulty in Focusing –
Observed in the all individuals of both group.

Group A : 21 patient were Cured out of 30.

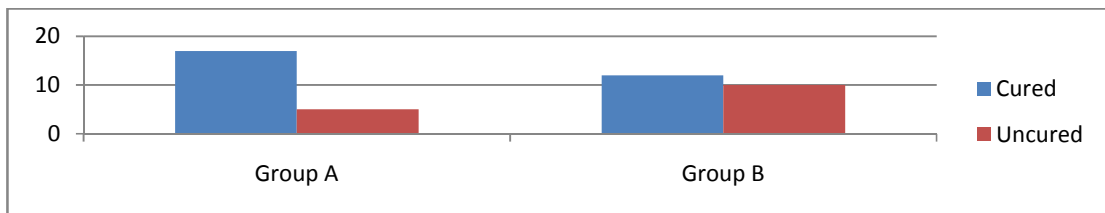
Group B : 18 patient were Cured out of 30

Equally effective

According to Chi² test result was insignificant at level of significance of 0.05 and degree of freedom (d.f.) 1.

DOUBLE

VISION



Double Vision was observed in 22 individuals of both group

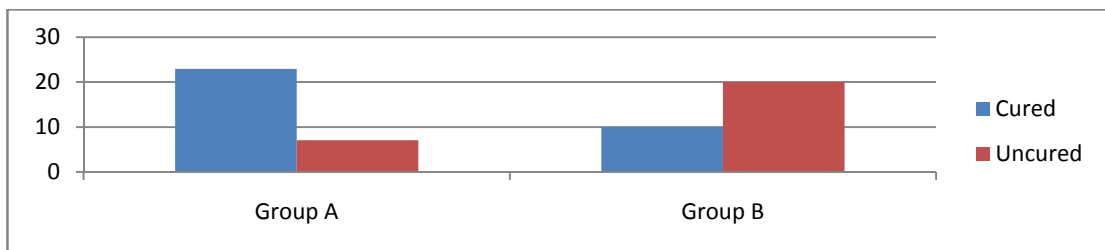
Group A : 17 patient were Cured out of 22

Group B : 12 patient were Cured out of 22

Equally effective

According to Chi² test result was insignificant at level of significance of 0.05 and degree of freedom (d.f.) 1.

HEADACHE



Headache

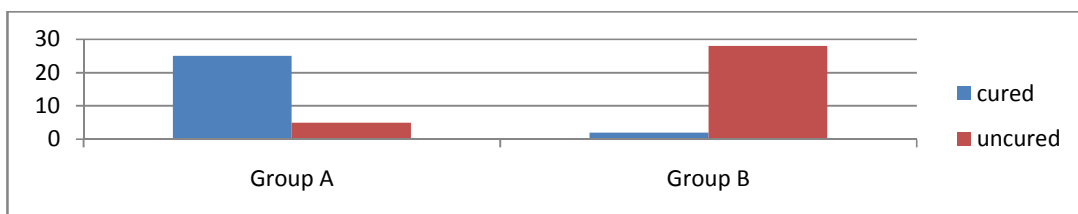
Observed in the all individuals of both group.

Group A : 23 patient were Cured out of 30.

Group B : 10 patient were Cured out of 30

According to Chi² test result was highly significant at level of significance of 0.05 and degree of freedom (d.f.) 1.

NECK/ SHOULDER PAIN/ BACKACHE



Neck/ Shoulder pain/ Backache

Observed in the all individuals of both group.

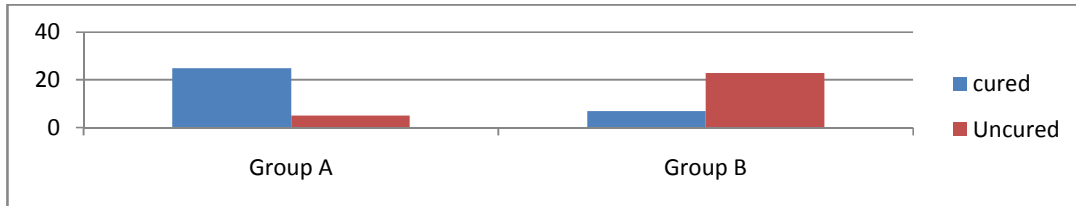
Group A : 25 patient were Cured out of 30.

Group B : 02 patient were Cured out of 30

Highly significant

According to Chi² test result was highly significant at level of significance of 0.05 and degree of freedom (d.f.) 1.

FATIGUE:



Fatigue

Observed in the all individuals of both group.

Group A : 25 patient were Cured out of 30.

Group B : 07 patient were Cured out of 30

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