

# A Non-Randomized Clinical Study To Assess The Role Of Complete Repertory In The Management Of Ocular Complaints Of Computer Vision Syndrome Using Cvs-Q Scale

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## Abstract

**Background:** Computer vision syndrome (cvs), also referred to as digital eye strain, comprises a spectrum of ocular and visual symptoms resulting from prolonged use of digital display devices such as computers, tablets, and smartphones. Increasing reliance on digital technology in occupational and educational settings has resulted in a high prevalence of cvs worldwide. Common symptoms include ocular dryness, burning sensation, blurred vision, headache, and eye fatigue. Homoeopathy adopts an individualized therapeutic approach where medicines are selected based on the totality of symptoms, and repertories assist practitioners in systematic remedy selection.

**Objective:** To evaluate the role of the complete repertory in selecting individualized homoeopathic medicines for the management of ocular complaints associated with computer vision syndrome.

**Methods:** A single-blind non-randomized clinical study was conducted among 30 patients aged 18–45 years presenting with ocular complaints related to cvs. Symptom severity was assessed using the validated computer vision syndrome questionnaire (cvs-q) before and after treatment. Individualized homoeopathic medicines were selected through repertorial analysis using the complete repertory.

**Results:** The mean cvs-q score reduced from  $18.7 \pm 3.53$  before treatment to  $3.63 \pm 2.65$  after treatment, indicating statistically significant improvement ( $p = 0.002$ ). *Ruta graveolens* was the most frequently prescribed remedy, followed by *natrum muriaticum* and *arsenicum album*.

**Conclusion:** Individualized homoeopathic treatment guided by repertorial analysis using the complete repertory demonstrated significant reduction in ocular symptoms associated with computer vision syndrome. Further controlled studies with larger samples are required to confirm these findings.

**Keywords:** Computer Vision Syndrome, Cvs-Q, Homoeopathy, Complete Repertory, Digital Eye Strain.

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## 1. Introduction

Computer Vision Syndrome (CVS) refers to a group of eye and vision-related problems associated with prolonged use of digital display devices such as computers, tablets and smartphones<sup>1</sup>. The increasing

use of digital technology in professional and academic environments has resulted in widespread exposure to visual display terminals, contributing to the growing prevalence of CVS worldwide<sup>2</sup>.

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Symptoms associated with CVS include eye strain, dryness, irritation, blurred vision, headache and difficulty focusing<sup>3</sup>. Epidemiological studies report that approximately 60–90% of individuals who use computers for extended periods experience at least one symptom related to CVS<sup>5,6</sup>. Reduced blinking rate during screen use leads to tear film instability and contributes to ocular surface dryness and discomfort<sup>7</sup>.

Risk factors associated with CVS include prolonged screen exposure, improper viewing distance, glare, poor lighting conditions and uncorrected refractive errors<sup>8</sup>. In addition to ocular complaints, affected individuals may experience musculoskeletal symptoms such as neck pain and shoulder discomfort due to poor ergonomic posture<sup>9</sup>.

Management strategies for CVS generally include ergonomic modifications, scheduled breaks from screen exposure, artificial tear supplementation and environmental adjustments<sup>10</sup>. However, these measures often provide only symptomatic relief and may not address individualized symptom presentations.

Homoeopathy emphasizes individualized treatment where remedies are selected based on the totality of symptoms exhibited by the patient<sup>11</sup>. Repertories serve as systematic tools that assist practitioners in analyzing symptoms and identifying the most appropriate remedy. The Complete Repertory compiled by Roger Van Zandvoort represents an expanded development of Kent's repertory and contains numerous rubrics derived from classical homoeopathic sources<sup>12</sup>.

Considering the increasing prevalence of CVS and the importance of individualized therapeutic approaches, the present study was undertaken to evaluate the role of the Complete Repertory in selecting homoeopathic medicines for the management of ocular complaints associated with computer vision syndrome.

## 2. Materials and Methods

**Study Design:** A single-blind non-randomized clinical study.

**Study Setting:** The study was conducted in the Outpatient Department of Bharati Vidyapeeth Homoeopathic Medical College and Hospital, Pune, along with rural and urban health camps organized by the institution.

**Sample Size:** Thirty patients aged between 18 and 45 years presenting with ocular complaints suggestive of computer vision syndrome were included.

### Inclusion Criteria:

- Patients aged 18–45 years.
- Presence of ocular complaints related to digital screen exposure.
- CVS-Q score  $\geq 6$ .
- Willingness to participate in the study.

### Exclusion Criteria:

- Patients with diagnosed refractive errors.
- Ocular diseases such as conjunctivitis, cataract, or corneal pathology.
- Patients with history of ocular surgery.
- Use of contact lenses or topical ocular medications.

**Assessment Tool:** The Computer Vision Syndrome Questionnaire (CVS-Q) developed by Seguí et al.<sup>4</sup> was used to evaluate symptom severity before and after treatment.

**Repertorial Analysis:** Detailed case taking was conducted and symptoms were converted into repertorial rubrics. Repertorial analysis was performed using the Complete Repertory.

**Intervention:** Individualized homoeopathic medicines were prescribed according to the totality of symptoms in appropriate potencies.

**Statistical Analysis:** Descriptive statistics and paired statistical tests were used to evaluate changes in CVS-Q scores before and after treatment.

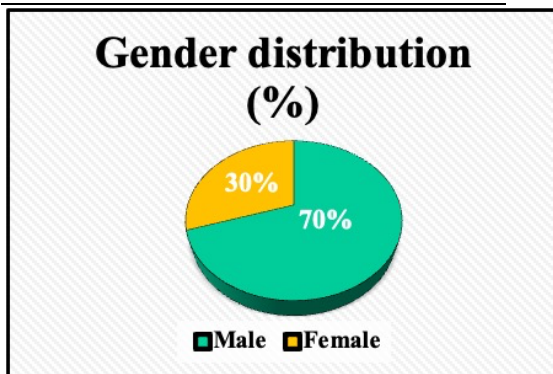
## 3. Results:

### DEMOGRAPHIC CHARACTERISTICS OF THE PATIENTS

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**Table 1: Distribution of Patients according to Gender**

Gender	No. of patients	
	n	%
Male	21	70
Female	9	30

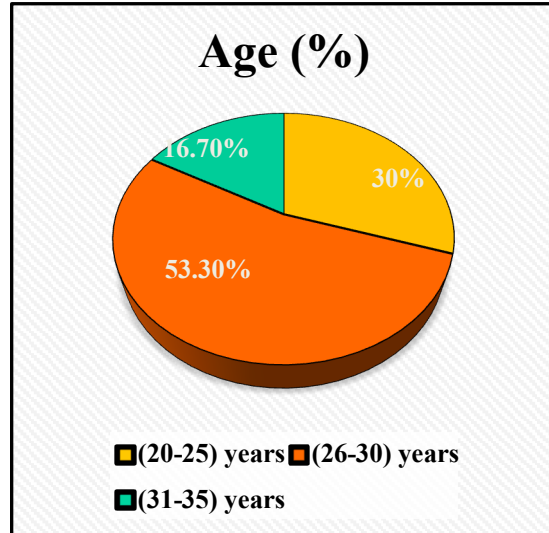


**Fig. 1: Pie diagram of gender-wise distribution of patients**

The table and graph above show that 70% of the patients were males and 30% were females, as observed in the gender-wise distribution.

**Table 2: Distribution of patients according to age**

Age	No. of patients	
	n	%
20-25	9	30
26-30	16	53.3333
31-35	5	16.6667



**Fig. 2. Pie diagram of age-wise distribution of patients**

Above table and graph shows the percentage of patients on the basis of their age range. According to the graph, 30% of patients belongs to the age group ranging between 20 to 25 years whereas 53.30% of the patients belongs to 26 to 30 years of age group. However, only 16.70% of patients are between the age group of 31 to 35 years.

**Table 3: Distribution of occupation status of patients**

Student		Job	
n	%	n	%
11	36.6666667	19	63.33333



**Fig. 3: Bar diagram showing the occupation of the patients.**

Table 3 and Fig. 3 displays that out of 30 patients chosen for the study, 63.33 % of patients were doing job and 36.33 were students.

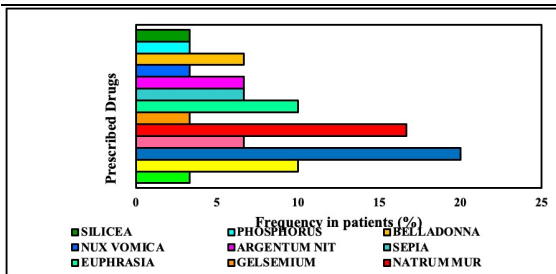
**Table 4: List and frequency of drugs intervened to different patients.**

Prescribed Drug	Frequency in patients	
	n	%
ARSENIC	3	10
ALBUM		

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SULPHER	1	3.33333
RUTA	6	20
PICRIC ACID	2	6.66666
NATRUM MUR	5	6.66666
GELSEMIUM	1	3.33333
EUPHRASIA	3	10
SEPIA	2	6.66666
ARGENTUM NIT	2	6.66666
NUX VOMICA	1	3.33333
BELLADONNA	2	6.66666
PHOSPHORUS	1	3.33333
SILICEA	1	3.33333

Before treatment	18.7±3.53	1.24
After treatment	3.63±2.65	0.002**
Mean difference	15.17±0.99	
p-value	0.002	

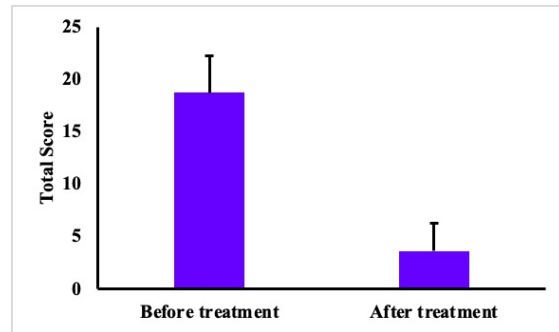


**Fig. 4: Bar diagram showing the frequency of the prescribed drugs in patient**

Table 4 and Fig 4 summarizes that the drug “Ruta” was prescribed the most (20%), followed by “Nat Mur” being prescribed (16.67%) while “Arsenic Album” and “Euphrasia” were equally common at (10%) each. Several drugs, including Picric Acid, Sepia, Argentum Nit, and Belladonna, were moderately used, each prescribed to about 6.67% of patients, prescription which is tail by the rest 5 drugs.

**Table 5 Descriptive Statistics of Total score CVS-Q scale of patients**

Total Score	Mean ± S.D	T-statistics
Before treatment	18.7 ± 3.53	1.24
After treatment	3.63 ± 2.65	0.002**



**Fig. 5: Bar diagram representing the Total Score before and after the intervention of the drug.**

The table 5 and Fig 5 provide descriptive statistics of the CVS-Q total score before and after the intervention in the management of Ocular complaints of computer vision syndrome . Before treatment, CVS-Q total score was 18.7±3.53(Mean±S.D), which reduced to 3.63±2.65 after treatment. The average CVS-Q total score in patients was observed to be 15.17±0.99. A t-statistic was performed to evaluate the improvement in CVS-Q total score. The t-test value was noted to be 1.24 with a p-value of 0.002\*\*. The value was observed to be significant.

## 4. Discussion

The present study evaluated the role of the Complete Repertory in selecting individualized homoeopathic medicines for the management of ocular complaints of computer vision syndrome. The findings demonstrated a significant reduction in CVS-Q scores following treatment. The demographic distribution observed in this study

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is consistent with previous investigations indicating higher prevalence of CVS among young adults exposed to prolonged screen use<sup>5,6</sup>. Reduced blink rate and continuous visual concentration contribute to tear film instability and ocular discomfort<sup>7</sup>. Ruta graveolens emerged as the most frequently prescribed remedy, which corresponds with its traditional homoeopathic indications for ocular strain and visual fatigue. The repertorial method provided a structured approach for analyzing patient symptoms and selecting individualized remedies. The Complete Repertory contains extensive rubrics and cross-references that enhance its clinical utility. However, limitations of the study include small sample size and absence of a control group. Future studies with randomized controlled designs and larger sample sizes are recommended to strengthen clinical evidence.

## 5. Conclusion

Individualized homoeopathic treatment guided by repertorial analysis using the Complete Repertory demonstrated significant reduction in symptoms of computer vision syndrome. The findings suggest that repertorial prescribing may play a useful role in the management of CVS. Further controlled clinical trials are recommended.

## 6. Author Contributions

All authors contributed substantially to the conception and design of the study. Data collection and clinical case management were performed by the primary investigator. Data analysis and interpretation were carried out with guidance from the supervising faculty. All authors participated in manuscript preparation, critical revision, and approved the final version of the manuscript for publication.

## 7. Ethical Approval

The study protocol was reviewed and approved by the Institutional Ethics Committee of Bharati Vidyapeeth (Deemed to be University) Homoeopathic Medical College and Hospital, Pune. The study was conducted in accordance with ethical standards for human research. Written informed consent was obtained from all participants prior to their inclusion in the study.

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## 9. Conflict of Interest

The authors declare that there is no conflict of interest regarding the publication of this article.

## 10. Acknowledgement

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## References

1. Rosenfield M. Computer vision syndrome: a review of ocular causes and potential treatments. *Ophthalmic and Physiological Optics*. 2011.
2. Sheppard AL, Wolffsohn JS. Digital eye strain: prevalence, measurement and amelioration. *BMJ Open Ophthalmology*. 2018.
3. Coles-Brennan C, Sulley A, Young G. Management of digital eye strain. *Clinical and Experimental Optometry*. 2019.
4. Seguí MDM, Cabrero-García J, Crespo A, Verdú J, Ronda E. Development of the Computer Vision Syndrome Questionnaire (CVS-Q). *Journal of Clinical Epidemiology*. 2015.
5. Logaraj M, Madhupriya V, Hegde S. Computer vision syndrome among medical students. *Annals of Medical and Health Sciences Research*. 2014.
6. Reddy SC, Low CK, Lim YP, Low LL, Mardina F, Nursaleha MP. Computer vision syndrome among university students. *Nepalese Journal of Ophthalmology*. 2013.
7. Uchino M, Schaumberg DA. Dry eye disease and digital screen use. *Current Opinion in Ophthalmology*. 2013.

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8. Abudawood GA, Ashi HM, Almarzouki NK. Computer vision syndrome among medical students. *Journal of Ophthalmology*. 2020.
9. Pandey R, Gaur S, Kumar R, Kotwal N, Kumar S. Computer-related musculoskeletal disorders and vision syndrome. *International Journal of Research in Medical Sciences*. 2020.
10. Portello JK, Rosenfield M, Bababekova Y, Estrada JM, Leon A. Computer-related visual symptoms in office workers. *Ophthalmic and Physiological Optics*. 2012.
11. Close Stuart. *The Genius of Homoeopathy*. New Delhi: B. Jain Publishers.
12. Tiwari SK. *Essentials of Repertorization*. 5th ed. New Delhi: B. Jain Publishers.