

## **What is Computer Vision Syndrome?**

**Computer Vision Syndrome (CVS)** is a term that describes vision-related problems and other symptoms caused by prolonged computer use. As our dependence on computers continues to grow, an increasing number of people are seeking medical attention for eye strain and irritation, along with back, neck and shoulder soreness.

## **Who is affected by CVS?**

Anyone who spends more than two hours a day in front of the computer screen is likely to experience some degree of CVS. Young children playing computer games over long hours and people over 40 years working on computers are more susceptible than others. Those with refractive errors, binocular vision problems, focusing disorders, dry eye disease, etc, are likely to suffer from worse symptoms of CVS as compared to others.

## **What are the symptoms of CVS?**

Symptoms of CVS may vary from person to person depending on various factors such as age, hours of computer usage, etc.

### **Common symptoms include:**

#### **Difficulty in reading/writing, even with reading glasses, if any;**

- Blurred vision;
- Double vision;
- Discomfort to light;
- Eye fatigue/eye ache;
- Redness, watering of eyes;
- Itching, burning of eyes;
- Headache;
- Neck/shoulder pain.

## **What causes CVS?**

- Few of the important causes of CVS are:
- Long hours of computer use;
- Inadvertent less blinking;
- Improper ergonomics of computer work-station;
- Minor inadequacies of eye co-ordination and focusing that are not apparent with general activities but become an issue with computer use;
- Bifocal glasses.

## **How is reading at the monitor screen different from reading a printed page?**

Reading a computer monitor screen is hard on the eyes because of the way the characters are formed on the monitor.

The video display is made up of pixels, or tiny dots, rather than solid lines as on a printed page. Because our eyes cannot "lock" focus on these dots, the eyes must continually focus and refocus to keep the image sharp. This focusing and refocusing results in stress to the eye muscles.

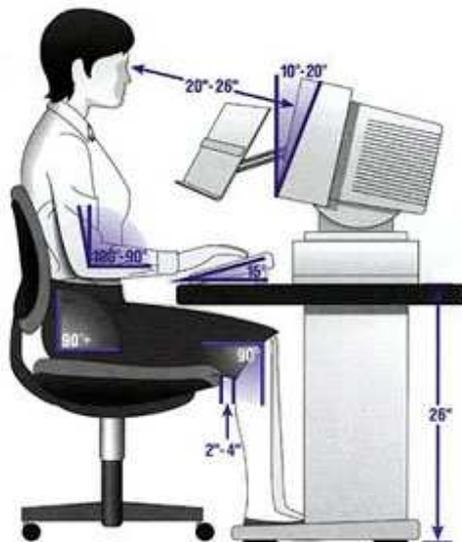


## Treatment

### How is CVS evaluated?

Various tests need to be performed by specialized eye care personnel for complete evaluation of CVS. Some of the important groups of tests are:

- Eye power check-up;
- Tests for muscles balance;
- Accommodation facility tests;
- Tests for binocular vision;
- Tears function tests;
- Ergonomic evaluation.



### **How can CVS be treated?**

Treatment options would vary from person to person depending on causative factors and extent of damage. Some of the important modalities are as follows:

- Convergence exercises;
- Exercises with Accommodative Flippers;
- Artificial tears medications;
- Ergonomic adjustments.

### **Can CVS be prevented?**

Yes, and like the old English adage, prevention is always better than cure. Given below are a few important useful tips on computer usage:

- The computer work-station should be ergonomically correct;
- Conscious frequent blinking of the eyelids during computer usage. Say every time you press 'Enter' or click the mouse as an example.
- Short break of about 15 seconds away from the screen every 20 minutes or so;
- Use appropriate glasses or contact lenses for correction of refractive errors, if any;
- People over 40 years age should use special 'computer' glasses and not bifocals during computer work.