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Eyes of the beholders

Blurred vision. Fatigue. Neck and back pains.

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MAY 25, 1998 - My eyes ache as I

write this at my computer monitor. I have trouble keeping the on-screen text from dancing an uncomfortable cha-cha as I type. When I look away, my eyes need time to readjust their focus. I have Computer Vision Syndrome (CVS).

Coined by the American Optometric Association in St. Louis, CVS is a catchall phrase for everything from eye strain to blurred vision, light sensitivity, headaches, fatigue and neck and back pains. The population at greatest risk: people who intensively use computers for two or more hours per day. (Can you say IT professional?)

"The eyes take the brunt of my computing experience, more than my hands," says Ken Schiff, a software designer who frequently spends 15 hours per day at the computer. For Schiff, money is no object when it comes to protecting his body against the rigors of computer use. But despite a custom-built office, special lights-- even expensive trifocal eyeglass lenses-- Schiff felt the burning effects of CVS.

Schiff isn't alone. The National Institute of Occupational Safety and Health estimates that 88% of those who work at computers three or more hours a day suffer from eye strain.

"I was having really bad headaches right behind the eyes that seemed to be getting worse the longer I sat at the computer," says Dale Carlson, a staff engineer at Mylex Corp. in Fremont, Calif. After months of migraine-strength headaches, Carlson had his eyes examined. The prescription: computer-specific glasses. Today, Carlson's headaches have disappeared. And that's typical with CVS symptoms, which studies suggest don't become permanent.

The problem is that staring at a computer screen is an incredibly demanding visual task. "One reason it's so demanding is that the image you are looking at is suspended in a box with a reflective front surface," says Dr. Gary Osias, an optometrist in San Lorenzo, Calif. "You know you can reach the front screen, but that's not where the image is-- it's behind the screen."

"For many people, correcting one thing in their workspace makes all the difference-- but that thing will be different for different people," Sheedy says. "And for many people, it's a shotgun approach that works."

TAKE AIM

Schiff opted for the shotgun method, transforming his Union City, Calif., office into an ergonomic palace. "I am a poster boy for what to do at home," he says. Schiff's chair is a throne of ergonomic adjustments, fitting his proportions like a fine Armani suit. Track lighting suffuses the office with soft, indirect light. His three monitors pamper the eyes with tiny dot pitch, sharp resolution and speedy refresh rates. The monitors are low, forcing him to cast his eyes down the requisite 20 degrees -- the better to keep eyes blinking and moist.

But still his eyes bothered him. And then Schiff heard about special computer-specific glasses made by Prio Corp. in Portland, Ore. Like his trifocals, these are prescription glasses. What's different? The diagnostic tool clips onto existing diagnostic equipment in a doctor's exam room and simulates a computer monitor. While a patient looks at the PRIO tester, a doctor uses a retina scope to see where the patient actually focuses. Schiff says he now sees more comfortably.

His former problems highlight the salient point about eye care and computer use: Try everything you can think of to make yourself comfortable. Pull down the blinds, dim the lights, lower the monitor, sit up straight and tall. Because when the body follows the eyes, the eyes can take it down a road nobody should travel.

Garner is a freelance writer in San Carlos, Calif.

For your viewing pleasure:

Six tips for reducing eye strain

1 Glare. While looking at the computer screen, use your hand to shield your eyes from any light sources in your room: lamps, windows, whatever. If you feel an immediate relaxation or soothing, you have a glare problem. Draw the blinds or wear a visor while working.

2 Light. Ideally, ambient light should have the same perceived luminance as the monitor itself. Too many overhead lights? Try disconnecting a few.

3 Reflection. Can you see yourself in the monitor? Do your eyes feel better when you place a manila folder on top of the monitor to block reflections? If so, tape the folder to the top of the monitor, giving it that sporty visor look.

4 Monitor distance. Ideally, the monitor should be placed 18 to 26 inches away from your eyes when you sit flush against the keyboard, your back against the chair.

5 Monitor height. Again, ideally, arrange the monitor so that the top line of on-screen text is at

eye level. Placing a monitor too high exposes more of the eye, causing it to dry out.

6 And, oh yes, DUST THE SCREEN. Staring through the yuck that coats the monitor places extra stress on the eye.

(Source: Health and ergonomic professionals interviewed for this story.)

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