



Computer Vision Syndrome and Its Recovery

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A Study on Computer Vision Syndrome and its Recovery
ABSTRACT Today's era is digital phase and it will more advance in the future, it's just the beginning of the digital era. We have started doing all the work with the help of electronic devices like computers and gadgets, which causes the most damage to the eyes. Now we are fully depended on the computers because they do the task on a quick time. But the electronic screens release some harmful lights, due to which our eyes suffers a lot. Eye is one of the sense organ out

Abstract :-

Today's era is digital phase and it will more advance in the future, it's just the beginning of the digital era. We have started doing all the work with the help of electronic devices like computer and gadgets, which causes the most damage to the eyes. Now we are fully depended on the computers because they do the task on a quick time. But the electronic screens release some harmful lights, due to which our eyes suffers a lot. Eye is one of the sense organ out of five, of human body. So, it is very essential to save this organ. In this paper we will see about Computer vision syndrome and how we can recover it.

Keywords :-

Computer vision syndrome, Blue light, UV light, lenses.

Introduction :-

Computer Vision Syndrome is a problem that affects the eyes. Computer Vision Syndrome percentage is increasing day by day because of electronic screen uses. Now a day we are using electronic screen in every field because it makes work easy and save time. Computer Vision Syndrome has symptoms like eye-strain, headache, eye-burning, dry eyes, eye-redness etc. During eye treatment of Computer Vision Syndrome patient, Dr. Recommend some eye drops for eye relaxation but this problem start again by using the electronic screen continuously.

Blue Light and UV Light :-

Both lights affect the eyes. Further we see the difference between both of them. But

behind Computer Vision Syndrome, the blue light is a reason.

Blue Light :-

- Blue light is mostly released from electronic screens. The blue light affects the eye retina.
- You must have understood now, that how much problem it can create, its wavelength intensity is high. Blue light affects less on the front of eye and more on back i.e. on retina.
- Noxious Blue light penetrates the macular pigment and damage the retina.
- Due to blue light, many problems are being created in the eyes like eye strains, headache, and eye redness.

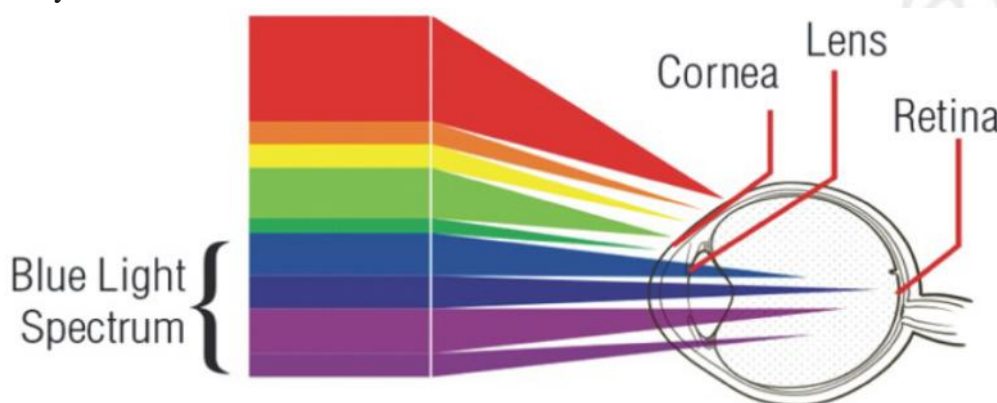


FIG. 1

In FIG.2 you can see how blue light affect our eyes. And you can also see how the blue light reaches to the retina. Everywhere Blue light is present. Sunlight also discharges blue light. But here we are talking about man made blue light and the sources are TVs, laptop, mobiles, tablets and computers.

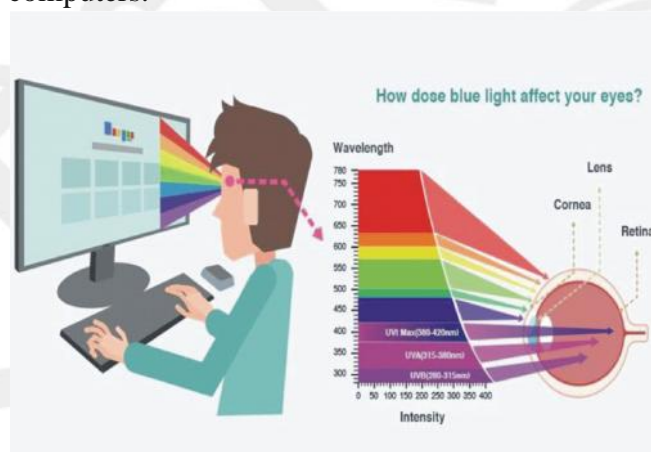


FIG. 2

UV Light :-

UV stands for Ultraviolet. UV light is an electromagnetic radiation. UV radiation is the part of the electromagnetic spectrum between x rays and visible light. UV light ranges between 4 – 400 nm with violet light and x rays. Today's computer monitors doesn't emit UV rays but in earlier CRT screen emit low level of UV radiation. You can see in FIG.3 how UV light affects the cornea, crystalline lens and retina.

Photokeratitis / UV keratitis causes inflammation in the cornea. In the cataract, a layer is formed in the eye that does not allow clear viewing and these problems are caused by old age. Cataract may occur in one eye or both. It is also occur due to UV light. In macular degeneration the UV light affects the retina, the retina becomes damaged and vision loss.

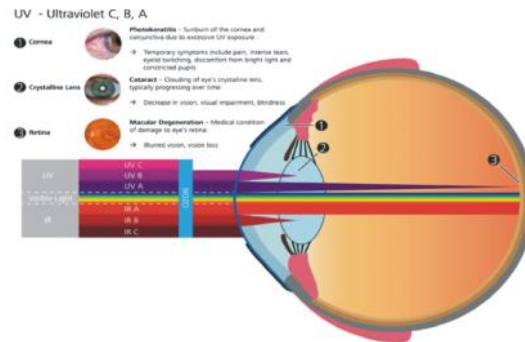


FIG. 3

Lences :-

There are many types of lenses and everyone has their own function and we using some lenses in the form of eyeglass. Eyeglass is the eyewear that is used to improve the vision problem. Today's lots of blue light blocked lenses are available. So, we can use that lenses in the form of eyeglass and protect our eyes from harmful blue light which are released from the screen.

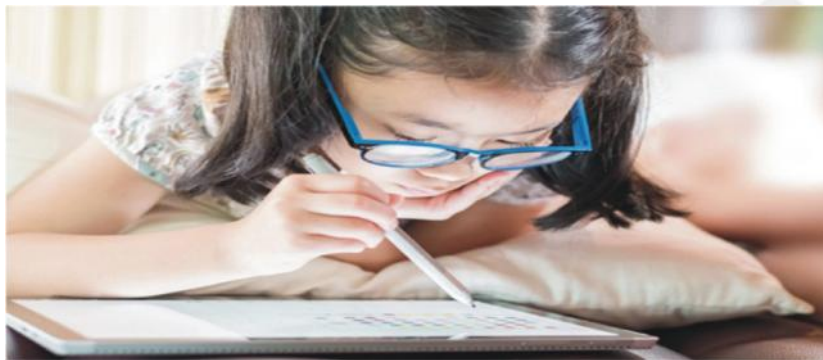


FIG. 4 : Blue light blocking lens

Prevention from Blue Light : -

- The correct sitting posture is also a way of prevention. In FIG.5 you can see the degree of your eyes into the screen and the degree of your sitting posture. If you follow this posture then you can recover with Computer Vision Syndrome.

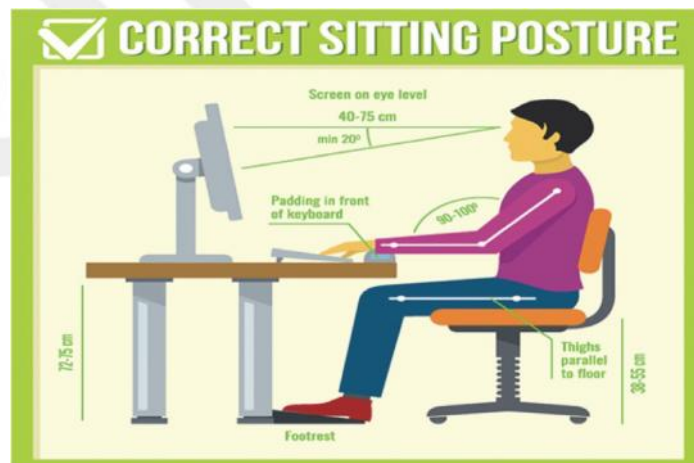


FIG. 5

- During working, in every 10 minutes, take break and blink eyes regularly.
- Use a guard on your screens who reflect the blue light.
- Eye glasses whose lenses block the blue light and cure eyes. I think this prevention is portable. Because we are doing lots of work in a day, in office as well as home, so we can easily carry eye glasses.

Conclusion :-

In today's time, if we stay away from computers and gadgets, then we will be left behind from the world. This digital world will become more advance in the future and without these, you can no longer work. But now days, a sense organ "eye" is suffering a lot in this digital world.

Problems are occurring in the eyes due to continuous work on screen. The blue light emitted from the screen is a problem called computer vision syndrome. Blue light affect the retina of the eyes and damage them.

We can't stop the digital world but can protect our eyes. For that we need to consult with the eye specialist and the right treatment for this. We use such a lens in the glasses which prevents these blue lights. This lens does not have power, it can be worn while using computer or gadgets and it can protect our eyes from blue light. In this way we will be able to protect our eyes over time.

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