

Surya namaskar: can it damage your eyes??

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In the morning I did my Surya Namaskar , only to find, immediately after that I was not able to see ahead. This was how a young patient came to my OPD with this scared look

He told me, whenever he tried to see, he was seeing only black spots. On further questioning, he revealed that while offering his prayers, he looked at the sun as had been explained by elderly knowledgeable persons of the society. I suspected *Solar Retinopathy*.

My worst fears for my young patient came true when on eye examination; the digital fundus fluorescein angiography and optical coherence tomography reports proved that the patient was indeed suffering from solar retinopathy.

WHAT IS SOLAR RETINOPATHY?

Solar retinopathy is burning of the retina due to sun gazing. It is a well recognized clinical entity of retinal damage caused by direct or indirect viewing of the sun. Other common names of this entity are *Eclipse retinopathy, solar retinitis, Eclipse burns, and Eclipse blindness*. Majority of cases of solar retinopathy involve eclipse viewing, religious sungazers, photographers and even sunbathers.

HOW DOES IT OCCUR?

When one is looking at the sun, in a normal eye, the light gets precisely focused on to the central part of retina, the fovea. The power of our vision is centered in this particular spot, the fovea. The light focused on the retina gets converted in to heat over the black cell layer and burns the cells leading to permanent damage. Since the light is focused on the fovea, even a second of a sun gazing is enough to cause permanent damage to the retina.

Normally, when we look at sun our pupil becomes small so the amount of light entering the eye is less and our retina is not damaged. But at the time of SURYA NAMASKAR or while looking at sun during a solar eclipse, the intensity of sun's light is not that strong, our pupils tend to be larger in size, causing more amount of light to enter our eyes and possibly cause retinal burns and severe damage. The unfortunate aspect is that there is no pain, but the vision is irrecoverable

WHAT ARE THE RISK FACTORS?

Various factors may determine the severity of retinal lesions and the loss of vision in solar retinopathy. Increased duration of exposure and the lack of protection for solar viewings are the major risk factors.

WHAT ARE THE OTHER SYMPTOMS?

Apart from decreased vision, patient may also experience distortion of vision, a black spot, altered color vision, after image and headache. In spite of a generally good prognosis, return of vision does not always imply complete recovery as the patient might keep on experiencing any of the above symptoms. Persistent black spots, image distortion may drastically reduce the reading performance in some patients.

WHAT IS THE PROGNOSIS?

Although, most cases of solar retinopathy improve over time without treatment, it depends on severity of lesions. The patients do not completely turn blind, but the impaired quality of vision and persistence of symptoms may hamper their activities

IS THERE ANY TREATMENT?

In spite the lack of standardized protocol, corticosteroids and antioxidants are believed to be beneficial in its treatment. Anti oxidants may ameliorate retinal injury. Appropriate protective measure while viewing an eclipse and education about the hazards of direct staring are the mainstay in the prevention of this condition.

IS THEIR ANY WAY TO LOOK AT SOLAR ECLIPSE?

Viewing an eclipse through binoculars, sun glasses, exposed photographic or radiographic film or audio CD's is never safe. Commercial solar filters certified as being safe have been shown to be the only safe method for eclipse observations.

'ALWAYS REMEMBER PREVENTION IS BETTER THAN CURE'

Don't confuse Surya Namaskar with sun gazing. Surya Namaskar is not looking at sun with open eyes, but offering prayers to the powers of Surya or the master source of energy.

' OFFER YOR PRAYERS, BUT WITH CAUTION'

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