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Opinion

World Sight Day 2023

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World sight day is observed on second Thursday of October every year. The theme for World sight day 2023 is "Love your eyes at work".

Eye is prone for occupational injuries and hazards like any other part of the body.

Classification of Occupation with relation to ocular damage

- Professionals/ Software/IT/ students dry eye
- Teaching/ Gardening/ rearing pets chalk allergy, pollen allergy, pet allergy.
- Industrial/ mines chemical injury
- UV light -over-exposed workers mariners/ fishermen/ saltworkers / executives/ drivers

Professionals/ Software/ students/ IT/ lecturers/ online classes/ online Gamers:

Almost spend 6-8 hours of work with one of the gadgets like PC/ laptop/ tablet/ mobile. Failure to blink frequently leads to evaporative dry eye initially and evolves into Computer vision syndrome.

Computer vision syndrome/Digital eye strain

It is a condition resulting from focusing the eyes on a display device for protracted, uninterrupted periods of time and the eye muscles become unable to recover from the constant contraction required to maintain focus on a close object.

Symptoms include headache, blurred vision, neck pain, fatigue, dry eyes, double vision, vertigo/dizziness and difficulty refocusing the eyes.

Eventually blue light emanating from the digital screen when watched during night hours may cause early occurrence of retinal and macular degeneration due to phototoxicity. Received: October 30, 2023 Published: November 27, 2023 © All rights are reserved by Rajalakshmi S.

Steps to overcome

• Follow "20:20:20 rule"

Every 20 min of continuous screen time, watch an object at 20 feet for 20 seconds.

Normal blink rate is 16 to 20 times per minute however it is reduced when we are engrossed with screen time.

- If symptoms are persisting, artificial tears as 0.5% CMC or 1% CMC gel or HPMC can be used 3 to 4 times per day
- Trehalose and sodium hyaluronate eye drops share the added advantage of stabilizing the phospholipid layers, reducing oxidative damage and inflammatory cytokines in the conjunctiva apart from retaining water and thereby hydrating the ocular surface.

Exposure to allergens

Allergens cause constant irritation of eyes, leading to papillary reaction of the palpebral conjunctiva. Large papillae may result in corneal SPKs, epithelial defects and irritation.

Steps to avoid allergen exposure

- Via inhalation: Use mask while working with allergens like pets, birds, gardening
- Via direct fall of allergen to eye: use protective goggles
- Via use of topical medications like anti glaucoma drugs: Regular ophthalmic consultation may help identify the follicular reaction of brimonidine earlier and can consider switch over to another group of anti-glaucoma drug.
- Use of mast cell stabilizer eye drops like Olopatadine may help in prevention of ocular allergy.

Industrial/chemical injury

Workers in industries and mines are prone to exposure of chemical, smoke and coal into the eyes for long term. It may leave acute and chronic impact in the eyes.

Acute chemical injury

Necessitates immediate ophthalmologist intervention by continuous saline irrigation to neutralize the pH of the chemical followed by slit lamp examination to examine for limbal ischemia and corneal epithelial defects.

Chronic exposure to the chemicals, just like Byssinosis, silicosis, can cause chronic follicular or papillary conjunctivitis and tear film dysfunction.

Steps to overcome

- Frequent conduction of educational and screening camps for employees by the organization.
- First aid room with trained medical officers to treat ocular chemical injuries

UV-light exposure

Marine engineers in ship, deep sea fishermen, salt workers suffer several ocular surface disorders like pingecula, pterygium, dry eye and suffer accidental trauma to eye.

Pathophysiology

Direct and reflected UV light from water.

Steps to overcome

- Annual Eye check-ups,
- IEC material distribution,

• Carrying first aid antibiotic and lubricant drops in boats till they reach shore and consult Ophthalmologist especially during times of fish related injury to the eye.

All the facts although well known to the fellow Ophthalmologists, we fail to conduct frequent camps to insist on these possible occupational hazards to the eyes of the poor workers. Professionals should be aware of the possible ocular damage and subsequent dry eye symptoms and better they reduce their screen time rather than suffer dry eye for the rest of their life.

Let us pledge today to prioritize our eye health at work!