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Managing Eye-Related Adverse Events Caused by Cancer Treatments

Announcer:
You're listening to ReachMD. This medical industry feature, titled "Managing Eye-Related Adverse Events Caused by Cancer Treatments" is sponsored by AstraZeneca.

Dr Pasricha:
Some cancer medicines may cause problems with the eyes or with vision.[1,3,7,10] Most of these eye-related adverse events may be mild, brief, intermittent, reversible, and not associated with structural changes.[1,9,10,19,22,27] Other visual effects may be long-lasting and could involve permanent vision loss or structural changes of the eye.[7,10,16,19]

Hi, I'm Dr Neel Pasricha. As an ophthalmologist, I'd like to share my perspective on eye-related adverse events caused by cancer treatments. If there are symptoms of concern, such as floaters or flashes of light, refer patients to an optometrist or an ophthalmologist for an eye exam to rule out structural eye abnormalities that may lead to permanent vision changes. If drug-induced visual effects persist but no structural pathology is found, no intervention is typically required.

It's important to be aware of the safety profile for each medicine, so patients can be properly counseled and eye-related adverse events can be managed if patients experience them while on treatment. Although adverse events can arise from a variety of underlying pathological conditions, let's focus on some key eye-related adverse events observed in recent oncology clinical trials.[6,8,9,20,22,23,27,28]

Photopsia, also called eye flashes or flashing lights, includes sudden or brief bursts of light—such as sparkles or lightning-bolt shapes—that happen without an obvious light source.[15] They can appear and disappear and may be associated with transitions from darkness to bright light.[22] The number, size, and intensity of flashes, as well as their location in the field of view, can differ based on patient experience and cancer medicine.

Diplopia is also called double vision, which involves seeing two images of a single object.[11] The images may be separated vertically, horizontally, or at an angle and may involve one or both eyes.[25]

Visual perseveration, also called palinopsia, is an eye-related symptom in which images persist or recur after they are no longer physically present.[13,29] Images may linger, reappear, or distort the current field of view and may appear like a trailing effect.[13]

Visual impairment involves reduced vision that is not correctable by eyeglasses or contact lenses.[5] Its severity may be measured by loss of visual acuity, which is based on an average vision of 20/20 on an eye chart, or by loss of peripheral vision.[4,5]

Photophobia is defined as avoidance of light or light sensitivity.[14,26] Bright lights may cause patients eye discomfort or eye pain that ranges in severity from not affecting daily life to limiting a patient's ability to take care of themselves.[14,26]

Other eye-related adverse events, such as dry eye and blurry vision, may also occur in relation to cancer medicines.[9,10,30] Dry eyes may manifest as several related symptoms, including photophobia, blurry vision, eye pain, and even watery eyes, which can occur as a response to the associated irritation from dry eyes.[24]

To explore the wide range in severity of patient experiences with these adverse events, let's review photopsias, or flashing lights, as an example.

Flashing lights can vary from mild to severe but, unlike some other eye-related adverse events, they do not rise to the level of life-threatening.[15,26] Grade 1 flashing lights involve mild symptoms that do not limit a patient's daily activities.[15,26] Grade 2 flashing lights limit a patient's ability to perform instrumental daily activities, such as shopping for food.[15,26] And Grade 3 flashing lights limit daily self-care activities such as dressing or bathing.[15,26]

So how might eye-related adverse events be addressed? Because these events can sometimes arise soon after starting treatment, oncologists should discuss any risks and potential symptoms with patients before starting treatment, so they are aware of the eye-related adverse event profile specific to each medicine.[7,12]

For certain cancer treatments that carry a risk of serious eye-related adverse events, patients should undergo a baseline exam with an eye care professional such as an optometrist or ophthalmologist and have exams from time to time while on treatment to help identify any urgent concerns.[2,7,12,21] These exams could also rule out other causes of eye-related issues, such as cataracts, glaucoma, or macular degeneration.[17]

Other cancer treatments with a lower risk of eye-related adverse events may not require baseline eye exams to start treatment.[18] That is why it's important to know the medicine-specific risks of eye-related adverse events when counseling patients and choosing the appropriate monitoring plan.

If any eye-related adverse events occur and persist, follow the adverse event management guidelines included in the FDA-approved prescribing information. Dose reductions, dose interruptions, or permanent discontinuations may be needed to improve or resolve these eye-related adverse events.[1,9,10,18,22]

Announcer:
This program was sponsored by AstraZeneca. If you missed any part of this discussion, visit Industry Features on ReachMD.com, where you can be part of the knowledge.

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