

Floaters and Flashes in Your Vision

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Summary: Seeing "cobwebs," "spiders," small filaments, lines or moving spots in one's field of vision could be very distressing. Similarly, seeing flashing lights would also be of concern. A clear understanding is essential to reassure and protect maturing adults regarding the common phenomena of "flashes and floaters."

The last 2 topics we have covered in this column have addressed some pretty serious conditions (age related macular degeneration and diabetic retinopathy). So let's try to lighten things up a bit with a discussion about something far less threatening, albeit annoying. This week's discussion will be on "flashes and floaters," something most people experience as they mature.

Seeing "cobwebs," "spiders," small filaments, lines or moving spots in your field of vision could be very distressing. Similarly, seeing flashing lights would also be of concern. Both phenomena, called "flashes and floaters" indicate the need for an eye examination to rule out any problems, but both are usually a normal (if not somewhat annoying) process of the aging eye. So let's discuss flashes and floaters so you'll understand them if and when you see yours.

In the back (posterior) of the eye is a chamber filled with a gelatin-like substance called vitreous humor (see diagram). It is quite thick with embedded clumps and strands of protein within it. It is also firmly attached to parts of the retina at the back of the eye. As we begin to age (usually beyond 20 or 30) the vitreous begins to thin and become more watery. This causes the clumps and strands to begin to move about and when they pass through our line of sight where light is entering our eye, they will cast a shadow on the retina. We see this shadow in our vision as a moving filament, spot or whatever shape the clump may be. These are what we call "floaters."

Any floaters should be checked by an eye doctor when you first notice them to verify that they are normal. They may get larger and more obvious as we get older, especially if some of these moving clumps, strands, etc. begin to get enlarge or stick together. However, normal floaters would never block your vision and they will always have some movement to them. They should not show any dramatic changes like rapid increases in size or increasing amounts. Any such significant changes in floaters should be rechecked by your eye doctor.

As this aging of the vitreous continues (usually beyond 50 to 55), it can also begin to shrink and pull on or away from (posterior vitreous detachment) its retinal anchoring points. The retina is nervous tissue that transmits the light entering the eye to the brain producing vision. But any stimulus to the retina, like pulling of the vitreous as it shrinks, will be interpreted by the brain as light stimulation, even if it can not translate that into vision. Thus, the brain interprets the pulling sensation as flashing lights. And these are the "flashes" that some people begin to see as they get

older. Certain types of flashes can also be produced by migraines (usually jagged lines or "wavy" phenomena), neurological disorders and especially, retinal problems.

While most flashes in the field of vision are normal for the aging eye, from their description you can recognize that in some limited cases they could be a sign of a more serious retinal problem. As we mentioned, any stimulus to the retina other than the light it translates into vision will be seen as flashing lights. So, if the retina had a dangerous hole or tear, or if there were a retinal detachment, the symptom to the patient would also include flashing lights. People with posterior vitreous detachments (vitreous pulling away from the retina) have a slightly greater risk for retinal detachment. Thus, it is of utmost importance to have an immediate dilated pupil examination the first time you experience flashes and any time there might be an increase or significant change in the pattern of flashes you experience.

There is no cure for or removal of floaters or flashes if and when they occur. With time, most floaters will become less noticeable as the brain adjusts to their presence and "tunes them out." If you consciously look for them, your floater will always be observable and present, especially when reading or, if you move your eye in different directions you'll usually see one "float by." Also, if you cover one eye and look at a light-colored background you're sure to spot them. As long as you have had them checked by your eye doctor, there is no need to worry