

Floaters & Flashes

The symptom of floaters is most often due to the separation (or detachment; but not a “retinal detachment”) of the posterior vitreous from the optic nerve. The abbreviation we use for this condition is PVD (posterior vitreous detachment). The symptoms however, are usually complaints of gnats or variously shaped bugs or worms or ‘squiggly’ shapes appearing superimposed on one’s vision. It is a natural process that occurs in virtually everyone beginning around age 40 and finishing in most everyone by age 80: it’s another “birthday thing.”

Once the vitreous, which has the consistency of uncooked egg white, separates, it condenses and thickens. This thickening process may result in a dense structure that casts a shadow onto the back of the eye. This shadow is what looks like the various shapes described above. Thus, what one sees are not the protein particles themselves, but the shadow of the particles. This also explains why one cannot look at the floaters when trying to see them, as they dart about and don’t remain stationary.

Often patients say the floaters come and go. Actually, they don’t go anywhere: they’re stuck inside your eye (unless some surgically removes them). Why they seemingly come and go is a function of your pupil size and the background illumination. When your pupils are small and the background is bright (sky, white wall), you’ll see the floaters. When there’s a dark background, and your pupils are more dilated, the floaters disappear.

Flashes on the other hand, are misinterpreted electrochemical signals sent to the brain. That is, normally when light strikes the retina it stimulates a signal in the photoreceptors that is sent to the brain for analysis. However, during a PVD, the vitreous may be mechanically pulling on the retina until it completely separates (detaches). The mechanical tugging triggers the photoreceptors to fire off signals to the brain. The brain, not knowing that the origin was mechanical, misinterprets the signal as a flash of light.

Other common sources of light flashes are retinal detachments and ophthalmic migraines. The latter differs from vitreous flashes in that the flashes are usually not lightening bolt-like in only the eye, but instead are arc- or kaleidoscope-like and occur in both eyes, lasting for a 15 to 30 minute periods. Also, in the case of migraines, often the flashes are followed by a headache. Neither vitreous, nor retinal, detachments create headaches.

If a PVD is diagnosed, that should be a relief as there is no evidence of a retinal detachment. However, if the darks specks become more numerous, and you begin seeing dozens or hundreds of them, then you need to be re-examined, even if it’s only a week after the initial examination. Increased specks or an increase in flashing lights can be a sign of a PVD turning into a retinal tear or detachment, warranting a re-check.