What causes flashing lights?
When the vitreous gel, which fills the inside of the eye rubs or pulls on the retina, it sometimes produces the illusion of flashing lights or lightning streaks. You may have experienced this same sensation if you have ever been hit in the eye and seen "stars". The flashes of light may appear on and off for several weeks or months. This commonly occurs as a result from the normal aging process as we grow older and is usually not a cause for worry. On rare occasions, however, light flashes accompany a large number of new floaters and even a partial loss or shadowing of side vision. When this happens prompt examination by an ophthalmologist is important to determine if a torn retina or retinal detachment has occurred.

Flashes of light, which appear as jagged lines or "air waves", often lasting 10–20 minutes and present in both eyes, are likely to be migraine caused by a spasm of blood vessels in the brain. If a headache follows it is called a migraine headache. However these jagged lines or "heat waves" commonly occur without a subsequent headache. In this case, the light flashes are referred to as ophthalmic migraine, or migraine without headaches.

As with floaters, if you experience the abrupt onset of many light flashes you should be examined by an ophthalmologist. The examination will involve a careful examination of the retina and vitreous gel after your pupils have been dilated with an eye drop. Medical training and experience is required to perform this examination properly.
What are Floaters?
The small specks, "bugs" or clouds that you sometimes may see moving in your field of vision are called floaters. They are frequently visible when looking at a plain background, such as a blank wall or blue sky. These visual phenomena have been described for centuries; the ancient Romans called them muscae volitantes or "flying flies" since they can appear like small flies moving around in the air. Floaters are actually tiny clumps of gel or cellular debris within the vitreous, the clear jelly-like fluid that fills the inside cavity of the eye.

Although these objects appear to be in front of the eye, they are actually floating in the fluid inside the eye and cast their shadows on the retina (the light-sensitive inner layer of the eye.)

Moving your eyes back and forth and up and down creates currents within the vitreous capable of moving the floater outside your direct line of vision.

What causes Floaters?
The vitreous gel degenerates throughout life, often forming microscopic clumps or strands within the eye. Vitreous shrinkage, collapse or condensation is called posterior vitreous detachment, and is a common cause of floaters. It also occurs frequently in nearsighted people or in those who have undergone cataract surgery operations or YAG laser surgery. Occasionally floaters result from inflammation within the eye or from crystal like deposits which form in the vitreous gel. The appearance of floaters, whether in the form of little dots, circles, lines, clouds or cobwebs, may be alarming, especially if they develop suddenly. However they are usually nothing to be concerned about, and simply result from the normal aging process.

Are floaters ever serious?
The vitreous covers the retinal surface. Occasionally the retina is torn when degenerating vitreous gel pulls away. This causes a small amount of bleeding in the eye, which may appear as a group of new floaters. A torn retina can be serious if it develops into a retinal detachment. Any sudden onset of new floaters or flashes of light should be promptly evaluated by your ophthalmologist. Additional symptoms, especially loss of peripheral or side vision, require repeat ophthalmic examination without delay.

What can be done about floaters?
Floaters may interfere with clear vision, often when reading, and can be quite annoying. Although there is no treatment or cure for most floaters, they usually diminish by themselves over time, moving out of the line of sight. If a floater appears directly in your line of vision, try moving your eye around. The inside fluid may swirl and allow the floater to move away. We are most accustomed to moving our eyes side to side, but looking up and down will cause different currents within the eye and may be more effective in getting the floaters out of the eye.