

What is a Cataract?



In order to understand what a cataract is, it is important first to understand the ideal human lens. The ideal human lens is crystal clear, has consistent refractive qualities throughout, provides perfect distance focus, and can accommodate for near vision.

With this perfect lens in mind, the various levels of dysfunction in the lens can be appreciated.

Level 1: Refractive Error. The first level of dysfunction is refractive error- nearsightedness, farsightedness, or astigmatism. We are born with this or develop it early in life, accept this as a fact of life, and treat it with glasses or contact lenses. Some of us have very little refractive error and don't wear glasses; others can't even begin their day without glasses.

Level 2: Presbyopia. The second level of dysfunction is presbyopia, or loss of accommodation. The lens is still clear at this stage. This typically begins in our 40's, as the eyes struggle to focus. Symptoms include blurred vision, headache, slowness of focus, and eye strain especially at near. You will be increasingly helped with bifocals and readers.

The first two levels of lens dysfunction, refractive error and presbyopia, continue to be present at every subsequent level.

Level 3: The Clear Cataract. In the third level of lens dysfunction, the lens is still clear but the lens material begins to lose refractive consistency. The lens begins to lose the ability to focus perfectly at any distance, even when corrected with glasses, bifocals, and contact lenses. Vision still may be close to 20/20, but you will experience loss of vividness, loss of contrast sensitivity, and more difficulty in low light situations. Glare increases. The 'clear cataract' can be very symptomatic. Many people begin considering cataract surgery at this stage.

Level 4: The Opaque Cataract. The fourth level of lens dysfunction occurs when the lens begins to lose its clarity, in addition to the above issues. This is an 'opaque cataract'. You may lose the ability to read or drive safely.

Level 5: The Mature Cataract. The fifth level is the 'mature cataract'. At this level, all useful vision is lost, and you can only appreciate light and dark, but no shape. The lens appears white to an observer. The 'mature cataract' is the historical source of the word cataract, which means "waterfall". People in the United States rarely progress to this stage.

Treatment:

With cataract surgery, you have the opportunity to treat not only the cataract, but all of the other lens dysfunction issues, including refractive error, and to some extent, presbyopia. For example, patients who have suffered from astigmatism all their lives have the opportunity to treat this, once and for all, during their cataract surgery using advanced technology. Examples of advanced technology include specialized astigmatic intraocular lenses, and femtosecond laser assisted surgery. You can find information regarding advanced technology options on my website.

Other causes of blurred vision:

As we age, other issues can also cause blurred vision. In the back of the eye, you may develop macular degeneration or glaucoma. In the front of the eye, loose lower eyelids, chronic eyelid inflammation, and tear film dysfunction also cause blurred vision.

Thankfully, four out of five elderly patients do not suffer from the diseases of the back of the eye. And, even if you do have macular degeneration or glaucoma, cataract surgery can still help you see better.

In contrast to the problems with the back of the eye which only affect a minority of elderly people, cataracts and eyelid/tear film dysfunction are practically universal with aging. After your cataract surgery, you might also be a candidate for further vision refinement through optimization of your eyelid function and tear film. If you are a candidate for tear film optimization we will discuss this with you during the course of your cataract surgical care.

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