



ALBERTA RETINA CONSULTANTS

Excellence in patient care, research and teaching

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What is a cataract?

A cataract is a change of the lens in the eye that affects vision. The lens is a clear part of the eye that helps to focus light, or an image, on the retina. The retina is the light-sensitive tissue at the back of the eye. It acts like the film in a camera.

In a normal eye, light passes through the transparent lens to the retina. Once it reaches the retina, light is changed into nerve signals that are sent to the brain.

The lens must be clear for the retina to receive a sharp image. If the lens is cloudy from a cataract, the image you see will be blurred.

Most cataracts are related to aging. Cataracts are very common in older people. By age 80, more than half of our population either have a cataract or have had cataract surgery.

A cataract can occur in either or both eyes. It cannot spread from one eye to the other.

How do cataracts develop?

Age-related cataracts develop in two ways:

1. Clumps of protein reduce the sharpness of the image reaching the retina.

The lens consists mostly of water and protein. When the protein clumps up, it clouds the lens and reduces the light that reaches the retina. The clouding may become severe enough to cause blurred vision.

When a cataract is small, the cloudiness affects only a small part of the lens. You may not notice any changes in your vision. Cataracts tend to "grow" slowly, so vision gets worse gradually. Over time, the cloudy area in the lens may get larger, and the cataract may increase in size. Seeing may become more difficult. Your vision may get duller or blurrier.

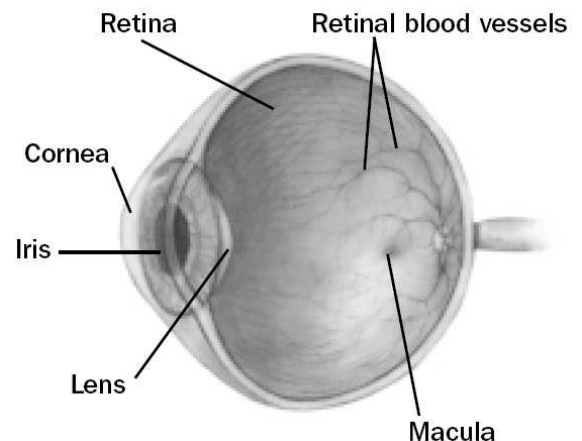
2. The clear lens slowly changes to a yellowish/brownish color, adding a brownish tint to vision. As the clear lens slowly colors with age, your vision gradually may acquire a brownish shade. At first, the amount of tinting may be small and may not cause a vision problem. Over time, increased tinting may make it more difficult to read and perform other routine activities.

Who is at risk for cataract?

The risk of cataract increases as you get older. Other risk factors for cataract include certain diseases (for example, diabetes), personal behavior (smoking, alcohol use), environment (prolonged exposure to ultraviolet sunlight). As well it is very common to develop cataract following other intraocular surgery – ie. Retina surgery for various eye disease.

What are the symptoms of a cataract?

- Cloudy or blurry vision.
- Colors seem faded.
- Glare. Headlights, lamps, or sunlight may appear too bright. A halo may appear



- around lights.
- Poor night vision.
- Double vision or multiple images in one eye. (This symptom may clear as the cataract gets larger.)
- Frequent prescription changes in your eyeglasses or contact lenses.

These symptoms also can be a sign of other eye problems. If you have any of these symptoms, check with your eye care professional.

How is a cataract treated?

The symptoms of early cataract may be improved with new eyeglasses, brighter lighting, anti-glare sunglasses, or magnifying lenses. If these measures do not help, surgery is the only effective treatment. Surgery involves removing the cloudy lens and replacing it with an artificial intraocular lens (IOL).

A cataract needs to be removed only when vision loss interferes with your everyday activities, such as driving, reading, or watching TV. You and your eye care professional can make this decision together. Once you understand the benefits and risks of surgery, you can make an informed decision about whether cataract surgery is right for you. In most cases, delaying cataract surgery will not cause long-term damage to your eye or make the surgery more difficult. You do not have to rush into surgery.

Sometimes a cataract should be removed even if it does not cause problems with your vision. For example, a cataract should be removed if it prevents examination or treatment of another eye problem, such as age-related macular degeneration or diabetic retinopathy.

What are the risks of cataract surgery?

As with any surgery, cataract surgery poses risks, such as infection and bleeding. Cataract surgery slightly increases your risk of retinal detachment. Other eye disorders, such as high myopia (nearsightedness), can further increase your risk of retinal detachment after cataract surgery. You need to discuss the risks with your cataract surgeon.

Can problems develop after surgery?

Problems after surgery are rare, but they can occur. These problems can include infection, bleeding, inflammation (pain, redness, swelling), loss of vision, double vision, and high or low eye pressure. With prompt medical attention, these problems usually can be treated successfully.

Sometimes the eye tissue that encloses the IOL becomes cloudy and may blur your vision. This condition is called an after-cataract. An after-cataract can develop months or years after cataract surgery. An after-cataract is treated with a laser. Your doctor uses a laser to make a tiny hole in the eye tissue behind the lens to let light pass through. This outpatient procedure is called a YAG laser capsulotomy. It is painless and rarely results in increased eye pressure or other eye problems. As a precaution, your doctor may give you eyedrops to lower your eye pressure before or after the procedure.

When will my vision be normal again?

You can return quickly to many everyday activities, but your vision may be blurry. The healing eye needs time to adjust so that it can focus properly with the other eye, especially if the other eye has a cataract. Ask your doctor when you can resume driving.

If you received an IOL, you may notice that colors are very bright. The IOL is clear, unlike your natural lens that may have had a yellowish/brownish tint. Within a few months after receiving an IOL, you will become used to improved color vision. Also, when your eye heals, you may need new glasses or contact lenses.