

From Drs. Fine, Hoffman, & Packer

CATARACTS

A cataract is any clouding or opaque area in the eye's natural lens, which is normally crystal clear. It is not a tumor or skin-growth over the eye. Most cataracts progress and eventually hamper vision, but merely having a cataract does not necessarily mean you have to do anything about it.

What Causes a Cataract?

Most cataracts develop as part of the aging process, from a change in the chemical composition of the lens. They don't usually become a problem until your 60s or 70s. If we live long enough, everyone will eventually develop cataracts. Several major studies have shown that prolonged exposure to sunlight, especially the ultraviolet-B rays (UV-B), over many years can play a role in hastening the development of a cataract.

Cataracts can also occur at a younger age from any number of causes: an eye injury (even many years earlier), certain eye diseases (such as uveitis), medical conditions (such as diabetes), heredity, birth defect, some medications (such as steroids - even if just used in an inhaler), excessive alcohol consumption, and smoking. They are not caused or made worse by using or "overusing" the eyes.

How Can You Tell if You Have a Cataract?

You may notice a gradual blurring or dimming of vision, sometimes more noticeable at distance, sometimes at near. In the early stages, using a bright reading light may make vision better (but a bright light might also make vision worse). Some people see a "halo" or haze around lights, especially at night, and/or have hazy or double (or multiple) vision, especially noticeable around traffic lights.

In the early stages, a cataract may not disturb your vision or cause any symptoms at all. You might not notice even an advanced or dense cataract if your other eye sees well. (You might only become aware of a problem if you happen to cover the "good" eye.) The symptoms may occur only in dim light or when you face bright oncoming car headlights, making night driving difficult.

Eye pain, headaches, and eye irritation are not symptoms of cataract. Unless a cataract is very dense and white, it will not be visible to the naked eye of a casual observer.

Once a Cataract Begins, How Rapidly Does It Progress?

As a rule, no one knows why some cataracts develop rapidly and others slowly. Generally, the clouding of the lens is a slow, gradual process that takes a long time, sometimes decades. On the other hand, there are some conditions, such as poorly controlled diabetes, in which a cataract can progress rapidly.

Recent studies show that antioxidant vitamin supplements, especially vitamins C and E, may help slow the process or even reduce the risk of developing cataracts. But other so-called "treatments," such as medication or exercise, do not help at all. And once cataracts have formed, they cannot be reversed.

How Are Cataracts Treated?

The only effective treatment is surgical removal of the cloudy lens. Cataract surgery is one of the most effective and safest operations performed today. The high success rate (about 95%) is due to advances in microscope technique, high tech precision instruments, and ultrafine needles and sutures.

Cataracts are NOT treated with lasers. If the cataract is small, surgery may be postponed for a while by changing your glasses prescription. If you have cataracts in both eyes, surgery is never done at the same time. You must wait for the first eye to heal before it is safe to proceed with the second eye surgery (typically at least 4 to 6 weeks).

Who Decides When To Remove a Cataract?

You do! You can postpone surgery until the cataract interferes with your vision so much as to make a difference in your life or livelihood. Since everyone's visual needs differ, this point will differ from one person to another. It is not necessary to wait until the cataract is "ripe" (totally opaque) before having it removed. You will be advised that you are a candidate for the surgery and how much improvement in vision you can expect from a cataract removal that is free of complications. You will then have to decide if the cataract is causing you enough trouble to warrant surgery.

There are certain rare circumstances that require cataract removal regardless of vision: if the lens begins to break down (become "overripe"), if the lens releases chemicals (break-down products) that might damage the eye and contribute to a type of glaucoma, or if the cataract is so dense that it prevents observation or treatment of some other eye problem or disease.

How Is a Cataract Removed?

The surgery can be done in an outpatient surgical suite or in a hospital. A small incision is made in the front of the eye and an instrument is inserted into the eye to remove the cloudy lens. Your eye remains in its normal position. It is never taken out of its socket.

There are several procedures for removing a cataract. With the "intracapsular" method (rarely used today), the lens is taken out in one piece along with the membrane enclosing it (called the capsule). With the "extracapsular" method, the front of the capsule is cut and the cloudy lens is taken out. The newest extracapsular techniques combine small incision surgery with phacoemulsification (FAKE-oh-ee-mull-sih-fuh-KAY-shun). With "phaco," a needle-like instrument that vibrates at high speed is inserted into the cataract to break it up. Then the tiny fragments are gently irrigated and suctioned out, and an IOL is inserted. The eye incision is closed, sometimes with sutures, sometimes without ("no-stitch" technique).

Will You Be Awake During the Operation?

Most people choose to have a local anesthetic, and stay awake (though drowsy). You will probably be given a sedative to calm you, and a local anesthetic, given either as eye drops or by injection under the eye, to numb the nerves for pain. The injection also paralyzes the eye muscles, to help keep the eye still during surgery. The lids may be separately injected with a local anesthetic to keep you from squeezing them during surgery. (The injections sting for only a few seconds.)

Sometimes general anesthesia is recommended: if you are especially frightened and don't wish to stay awake during the procedure; if there is a chance you might not be able to hold still; or if you have severe claustrophobia and cannot tolerate having your face covered during surgery. Children always need to have general anesthesia.

When Can Normal Activity Be Resumed?

You will probably be allowed to be up and around on the day of surgery, and in a short time return to most activities that do not require heavy lifting. In a day or so, it will be safe to use your eyes for reading or watching TV. Depending on the procedure used and the size of the incision, you should be able to resume full, normal activity in a few days, but you may be urged to wait for a month or so if your usual activities are strenuous.

What Will Vision Be Like After Surgery?

Your vision after surgery will depend on many factors, such as your vision before the cataract developed and the eye's overall condition. It also depends on how your eye will be optically corrected (IOL or cataract glasses). The surgery removes the natural lens from your eye. Without correction, your vision would be very poor.

If you have an intraocular lens (IOL) implanted during surgery, normal vision should be restored within a few weeks. An IOL is a permanent replacement for your natural lens. After it has been surgically placed inside your eye, it requires no care. You cannot feel or see it, and others do not notice it. Today, almost all patients having cataract surgery safely choose to have an IOL. Even though vision can be quite clear with an IOL, you may require some correction for reading and probably a correction to fine-tune your distance vision. A multifocal IOL is now available that can eliminate the need for reading glasses, but it has some disadvantages you'll need to consider. If such a lens interests you, learn all you can about it before making a decision.

It may take several weeks before the operated eye is fully healed and vision is stabilized. If you have need for critically sharp vision before then, temporary eyeglasses can be prescribed for you.

If you are not having an IOL - they are not appropriate for everyone - your vision will need to be restored by contact lenses or special cataract glasses. Contacts are better optically but not everyone can wear them or handle them easily. Cataract glasses work well but they are not easy to get used to - they are heavy, and they magnify and distort vision. But once you adapt to them, you'll find the improved vision well worth the effort.

What Complications Are Possible?

Some individuals, even with optical correction, do not obtain clear eyesight after the surgery. Some have pre-existing disease affecting the retina (such as macular degeneration) or optic nerve (such as from advanced glaucoma). Others develop one of the rare complications of cataract surgery. Any eye surgery, no matter how safe, presents some risk of infection, bleeding, glaucoma, corneal problems, chronic intraocular inflammation, or retinal swelling and detachment. Fortunately, these are usually temporary and/or can be treated with medications or surgery. With an IOL, there is a very slight additional risk: displacement of the IOL. It may be pulled off-center during the healing process, but this is rare. Rarely, a second surgical procedure will be needed.

Surgical results can never be guaranteed, but the odds are excellent that everything will be fine, and you will see just as well after the operation as you did before the cataract developed, and perhaps even better.