

Intraocular Lenses (IOLs)

An intraocular lens, commonly called an IOL, is a tiny artificial lens used in the eye when a cataract is removed. An IOL permanently replaces the eye's natural lens.

WHY IS THE EYE'S NATURAL LENS REMOVED DURING CATARACT SURGERY?

Normally, the eye's natural lens is clear, allowing light to pass through and focus on the retina. When a cataract forms, the lens becomes cloudy. It can no longer sharply focus light onto the retina. As a result, vision becomes blurred. The only way to treat a cataract is by removing the cloudy lens itself.

CAN I SEE CLEARLY WITHOUT A LENS?

No, the eye cannot focus properly without a lens. Thick eyeglasses, a contact lens, or an intraocular lens must be used for focusing. An IOL provides the best alternative and is used in almost all cataract procedures.

HOW WILL AN IOL AFFECT MY VISION?

IOLs come in different focusing powers, just like contact lenses and eyeglasses. Your ophthalmologist will determine the proper power of the lens implant preoperatively. First, the length of your eye and the curvature of your cornea are determined with ophthalmic instruments. Then these measurements are used to calculate the necessary focusing power of the IOL.

WHERE WILL THE IOL BE PLACED?

An IOL is placed in the center of the pupil, either in front of or behind the iris (the colored part of the eye). It is most commonly placed behind the iris where the natural lens was located.

WHAT IS THE IOL MADE OF?

Most of the IOLs implanted today are made of silicone or acrylic materials. These lenses can be folded and inserted through a small (approximately 3 millimeter) incision during cataract surgery. In the past, IOLs were made of hard plastic, similar to a hard contact lens.

WILL THE IOL EVER NEED TO BE REPLACED?

IOL implants are well tolerated by the eye and are intended to last a lifetime. Rarely do they need to be removed and replaced.

Monofocal IOLs The most common type of lens used with cataract surgery is called a monofocal IOL. It has one focusing distance. It is set to focus for up close, medium range or distance vision. Most people have them set for clear distance vision. Then they wear eyeglasses for reading or close work.

Toric IOLs For people with astigmatism, there is an IOL called a toric lens. Astigmatism is a refractive error caused by an uneven curve in your cornea or lens. The toric lens is designed to correct that refractive error.

Multifocal IOLs These IOLs provide both distance and near focus at the same time. The lens has different zones set at different powers. It is designed so that your brain learns to select the right focus automatically.