WHY **TORIC** INTRAOCULAR LENSES?

FOR PRECISE **ASTIGMATISM CORRECTION**.

PATIENT INFORMATION | Cataract treatment

OK, I HAVE A CATARACT. NOW WHAT?

WE UNDERSTAND YOUR CONCERNS – WE CAN HELP.

Dear patient,

Discovering you have a cataract can cause anxiety and concern. However, medical advancements available today offer reliable options for an effective cataract treatment. Additionally, they enable correction of other vision disorders you may have, such as astigmatism, allowing you to enjoy good eyesight again.

Our qualified team of cataract specialists employ the most modern technologies to effectively address individual visual requirements. They have helped many patients just like you regain their vision again.

Learn more about these advanced treatment methods and how they may help you with your specific vision needs.

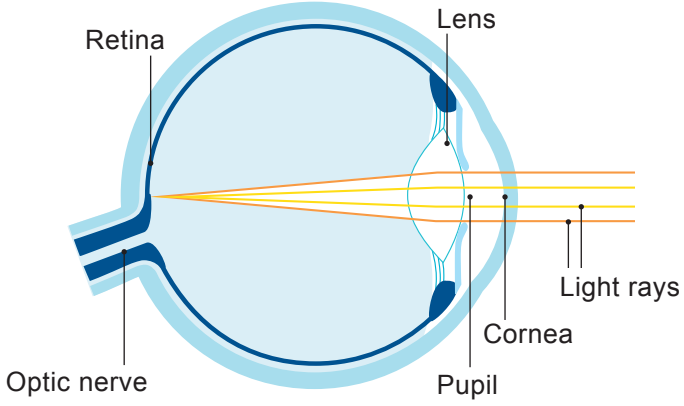
WHY AM I AFFECTED?
CATARACTS ARE COMMON.

What is a cataract?

A cataract is a gradual clouding of the natural lens of the eye, caused by a change in the protein structure. Most people are affected sooner or later. In fact, many people over 50 have some form of cataract.

How do cataracts occur?

In the healthy eye, the crystalline lens focuses the light rays on the retina in the back of the eye to form a clear image. With age, the lens becomes thicker and less transparent. It prevents light from passing through, thus causing a hazy vision called a cataract. A cataract is much like a foggy window you can't see through clearly.



Normal vision: Light rays are focused on the retina, forming a clear image. With cataract, less light enters the eye causing blurry vision.

TYPICAL CATARACT SYMPTOMS

- Gradual deterioration in vision quality
- Hazy or cloudy vision
- Faded color and contrast perception
- Increased sensitivity to bright light
- Frequent changes of eyeglass prescription

Normal vision Vision with a cataract

Untreated, the cataract gradually diminishes the quality of vision and can even lead to blindness. A cataract should be treated when it starts affecting your life.

HOW IS A CATARACT TREATED?
WITH A SAFE AND EFFECTIVE PROCEDURE.

Modern cataract treatment

A cataract cannot be treated with medication or corrected with eyeglasses. The cloudy cataract lens must be surgically removed. Cataract surgery is the most frequently performed surgical procedure in the world. It is widely regarded as safe and effective.

The procedure is usually performed on a comfortable outpatient basis using local anesthesia and takes about 15 to 30 minutes. The cloudy natural lens is gently removed through a tiny incision at the edge of the cornea.

It is replaced by a very small artificial lens (called an intraocular lens) that is implanted through the same incision. With intraocular lenses (IOLs), vision blurred by cataract can once again be restored to clarity.

Intraocular lenses represent highly innovative cataract treatment technology. Usually made of a soft synthetic, biocompatible material, the lens cannot be seen or felt in the eye. IOLs can have one or more focal points to simulate the visual properties of the natural lens, enabling you to enjoy better vision after surgery.

TREATMENT STEPS

1

SURGERY PREPARATION

Eye measurements to calculate the correct intraocular lens

2

OUTPATIENT SURGERY

Same-day procedure with a local anesthetic such as eye drops

3

FOLLOW-UP VISITS

First day after surgery, then for approx. a month, as needed

4

REGULAR EXAMINATIONS

Periodic check-ups by your eye doctor

WHAT DOES A MONOFOCAL INTRAOCULAR LENS DO?
IT CORRECTS VISION AT ONE DISTANCE.

Understanding lens implants
Monofocal IOLs

Different types of intraocular lenses are available today. All of them enable treatment of cataract. However, some IOLs offer added functionalities, for instance, correction of preexisting vision disorders to provide even better vision quality for specific distances after cataract surgery.

Monofocal intraocular lenses

The most common type of intraocular lens has a monofocal optic with a single corrective power. Monofocal lenses provide good vision at one distance only, usually far. As a result, patients with monofocal IOLs might need to continue to wear glasses for certain activities, for example, while working at the computer or reading.

Standard types of monofocal IOLs have a spherical optic, which is equally rounded on both sides. However, the natural crystalline lens of the eye has a slightly aspherical (not completely rounded) shape in the front, and is not equally curved on both sides. This shape enables it to precisely focus the light rays entering the eye on one point of the retina. The result is a clear, crisp image.

Modern monofocal IOLs are available with an aspherical optic very similar to the original shape of the crystalline lens, thereby enabling the closest thing to natural vision. They provide improved image quality and better contrast compared to spherical IOLs. This is particularly important for good night vision, especially while driving.

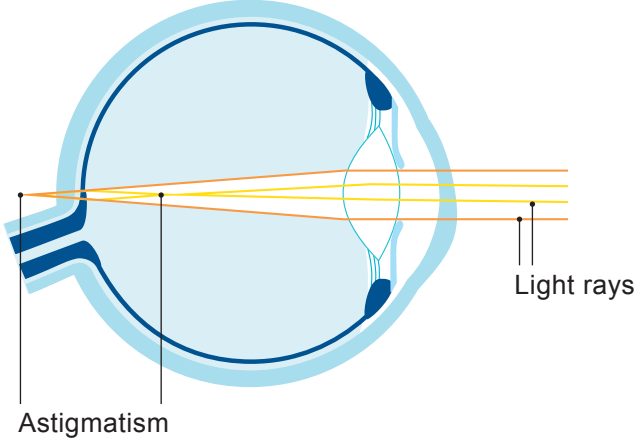
AND MY
ASTIGMATISM?
IT CAN BE
CORRECTED,
TOO.

Astigmatism correction

In addition to common vision disorders such as near and farsightedness, people diagnosed with cataracts frequently also have an astigmatism. In fact, this refractive error affects roughly one third of the entire global population.

What is astigmatism?

Astigmatism occurs when the cornea at the front of the eye has an irregular (slightly oval) shape. It causes objects at different distances to appear skewed or distorted. It is very common at any age. Normally, astigmatism is corrected with eyeglasses fitted with cylindrical (toric) lenses or with special contact lenses.



Due to the irregular shape of the cornea, the light is focused at various points, thus causing distorted vision.

Normal vision

Vision with astigmatism

Toric intraocular lenses

To treat both cataracts and astigmatism, a special type of intraocular lens must be implanted. So-called toric IOLs correct the distorted light rays passing through the astigmatic cornea. The light is then properly focused on the retina, providing good vision at one distance.

WHAT OTHER BENEFITS DO **TORIC IOLS** OFFER?

IMPROVED VISION QUALITY.

Innovative toric IOL technology for precise visual outcomes

Toric IOLs are high-quality intraocular lenses with an optic designed specifically to correct astigmatism and treat cataract. They offer astigmatic patients the nearest solution to natural vision, significantly improving their quality of life.

Toric intraocular lens technology has made great progress over the years. The most advanced toric IOLs available today provide several advantages, including a special design for a wide range of correcting powers. They can be used to treat patients with even higher levels of astigmatism.

Implantation of toric intraocular lenses

Implantation of a toric lens to correct conventional corneal astigmatism requires exact measurements of the patient's eye. These enable appropriate lens selection and positioning. Modern IOL technology allows for precise lens calculation, enabling reliable, customized visual outcomes.

ARE **TORIC LENSES** RIGHT FOR ME?
WE CAN HELP YOU DECIDE.

When your eyesight is at stake, you want the best treatment option possible. Toric intraocular lenses from ZEISS set new standards in cataract treatment. Their excellent visual qualities have helped numerous cataract patients worldwide greatly improve their vision. **AT TORBI** lenses from ZEISS are ideally suited for people with astigmatism who want to enjoy clear vision once again.

Our team of cataract specialists has relied on modern ZEISS IOL technology for years for restoring cataract-related vision loss. ZEISS is the world innovation leader in optics and one of the most trusted and respected brands in the field of medical technology. The company has a long tradition of manufacturing high-quality lenses for everything from glasses to cameras, microscopes, binoculars and intraocular lenses.

Our extensive treatment expertise combined with advanced medical products form the basis for achieving the best possible outcomes for patients. Consult with our specialists to see whether toric IOLs are the best option for you.

Designed for best vision results

Benefits of ZEISS AT TORBI lenses

- Improved vision quality for one distance – usually far
- Precise astigmatism correction to properly focus the light onto the retina
- Wide range of correcting powers to treat high levels of astigmatism

1:1

ZEISS AT TORBI lens and the actual IOL size

Feel free to contact our team
if you have any questions.

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