

# A COMPLETE GUIDE TO Cataract Solutions



TORONTO | OTTAWA



## Your freedom from cataracts start here.

More than half of all North Americans will develop a cataract by the age of 60. Herzig EyeInstitute has created this guide as a starting point for patients who are concerned about cataracts. Here you'll find key information to help you - or someone close to you - make an educated decision about the cataract treatment options that are available. Cataract surgery is one of the most frequently performed surgeries in North America and with our technological advances, it's quick and virtually painless.

Charry Jatt | Co-Founder & CEO

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# What is a Cataract?



A cataract is the clouding of the eye's natural lens, which lies behind the iris and the pupil. The lens works much like a camera lens, focusing light onto the retina at the back of the eye. The lens also adjusts the eye's focus, letting us see things clearly up close and far away.

The natural lens is mostly made of water and protein. The protein's position keeps the lens clear and lets light pass through it. As we age, some of the protein may clump together and start to cloud a small area of the lens - this is a cataract. Over time, it grows larger and clouds more of the lens, making it difficult to see. The cloudy lens (cataract) is then replaced surgically with a new intraocular lens to provide clear vision.

While early-stage cataracts can be treated with new glasses, magnifiers, or other visual aids, more developed cataracts require surgery. Ophthalmologists and optometrists can diagnose cataracts and confirm the maturity of the cataract. Cataracts can occur in one or both eyes, but do not spread from one eye to the other. Surgery to remove a cataract is not necessary until vision becomes impaired, or if it interferes with the treatment of other eye problems.

# SIGNS AND SYMPTOMS

Cataracts start out with mild clouding and get worse over time. In the early stages, patients might not be aware they are developing a cataract. As the cataract gets denser, it can block most of the light to your retina, making it difficult to see.

Some common symptoms of cataracts include:

- Cloudy or blurred vision
- Difficulty seeing at night
- Seeing halos around lights
- Problems with glare
- Frequent changes in your eyeglass or contact lens prescription
- Seeing double or multiple images in the eye with the cataract

## **Risk Factors for Developing Early Cataracts**

Since aging is a fact of life, everyone is at risk for developing cataracts. By the time you reach 60, you will probably have some degree of clouding, although your vision may not be impaired yet.

Some other factors may accelerate the development of cataracts, including:

- Family history of cataracts at a young age
- Diabetes
- Smoking or significant alcohol consumption
- Excessive exposure to ultraviolet rays
- Exposure to radiation, such as during cancer therapy
- Previous eye injury or surgery





## When Cataract Surgery is Needed

When symptoms begin to appear, you may be able to temporarily improve your vision with a new prescription for your glasses, strong bifocals, magnification, appropriate lighting, or other visual aids.

Cataract surgery is usually recommended when patients feel their quality of life has reduced and their ability to do normal activities, such as driving, reading, or sports, has been compromised.

In North America, unless your vision is at least 20/50 in one eye (you are able to see at 20 feet what the average person can see at 50 feet), you cannot legally drive. If driving an automobile is not essential, you may choose to stop driving and delay surgery until the cataracts interfere with other activities. Those who enjoy the independence of driving may wish to have surgery earlier to avoid losing their driving privileges even temporarily.

## **OUR PROCEDURES**

## PRECISION REFRACTIVE CATARACT SURGERY

### What is Precision Refractive Cataract Surgery?

Precision Refractive Cataract Surgery is the most exciting advancement in the field of cataract surgery since phacoemulsification was introduced over 50 years ago. It combines the extraction of a cataract with **advanced diagnostic technologies** and **premium intraocular lenses**. The goal of this procedure is to reduce or eliminate the need for glasses or contacts post-operatively. More than 90 percent of patients are completely glasses-free following Precision Refractive Cataract Surgery depending on the option recommended.

## **ORA<sup>™</sup>** System with VerifEye+<sup>™</sup> Technology

The ORA<sup>™</sup> System with VerifEye+<sup>™</sup> Technology is used during Precision Refractive Cataract Surgery and allows surgeons to evaluate refractive findings, refine intraocular lens power and alignment in real time, providing the best possible refractive outcomes to your cataract surgery. Recent enhancements to this exciting new technology include real time information, resulting in more accurate and predictable results.

## **Other Advanced Diagnostics**

There are other advanced diagnostic measurements which are not covered by OHIP, but are important for those looking to reduce their dependence on glasses following cataract surgery. These diagnostic tests include: Corneal Topography, Optical Biometry, and Optical Coherence Tomography (OCT).



## OUR PROCEDURES

## LASER-ASSISTED CATARACT SURGERY

#### What is Laser-Assisted Refractive Cataract Surgery?

Herzig Eye Institute was one of the first centres in North America to offer its patients Refractive Laser-Assisted Cataract Surgery (ReLACS), the new standard in precision cataract surgery with the added use of Catalys® Precision Laser System. Laser-assisted cataract surgery is gentler on the eye. The laser breaks the cataract into microscopic pieces resulting in 95% less ultrasound energy being necessary to complete the procedure. This prevents excessive trauma and potential damage to the cornea. The laser can correct astigmatism more accurately with curved corneal incisions.

### Image Guided Technology with the Catalys<sup>®</sup> Laser

The Catalys<sup>®</sup> laser combines a state-of-the-art femtosecond laser and advanced 3D Optical Coherence Tomography (OCT) imaging, performing critical steps in cataract surgery that were previously done manually. Catalys<sup>®</sup> advanced 3D imaging technology builds a map of your eye in real time and uses the map to tailor the treatment to your unique eyes. The circular opening made in the patient's lens with the laser is 10x more accurate than a manual opening. It accurately predicts the IOL position in the eye, and ensures a predictable refractive result.

## **OUR PROCEDURES**

## TRADITIONAL CATARACT SURGERY

## What is Traditional Cataract Surgery?

Traditional cataract surgery is a procedure completely covered by OHIP. The surgery includes an OHIP covered intraocular lens (IOL) and an ultrasound test (A-scan) to determine the power of the IOL to be inserted in your eye. It is possible to eliminate or reduce dependence on glasses with this technology, but almost all patients will need glasses after traditional cataract surgery. This procedure may be performed with your surgeon either at a Herzig Eye Institute location or at a hospital.

## **Intraocular Lens Options**

#### **Monofocal IOL:**

Designed to provide high quality vision at one focal point - either distance or near. May be combined with monovision to reduce dependence on reading glasses. Less risk of halos or glare. Best for patients with pre-existing ocular conditions and/or patients that prioritize visual quality over glasses independence.

#### Monofocal+ IOL:

Designed to provide high quality distance and intermediate vision. Can be combined with mini-monovision to help reduce dependency on reading glasses. Minimal risk of halos and glare. An option for previous laser vision correction patients, and those with mild ocular conditions (e.g., mild AMD, glaucoma).

## **Intraocular Lens Options**

#### Toric IOL (Astigmatism):

A toric IOL provides the added benefit of correcting pre-existing astigmatism. All IOLs have a toric lens option to correct for astigmatism.

#### Extended Depth of Focus IOL (EDOF):

Designed to provide an extended range of clear vision at various distances (far, intermediate, near reducing the need for glasses after surgery. Create a continuous range of focus, compared to multifocal IOLs which have specific focal points. Less glare and halos compared to multifocal IOLs. An option for previous laser vision correction patients.

#### **Multifocal IOL:**

Designed to provide patients with high quality vision at near, intermediate, and far distances, who are looking to reduce their dependency on glasses. Tend to provide the best quality near vision, with a higher risk of glare, halos, and contrast loss. Not suitable for those with ocular conditions, abnormalities, or previous laser vision correction patients.

#### **Monovision:**

Reduces dependency on reading glasses. The dominant eye is corrected for distance, while the non-dominant eye is corrected for up-close viewing. Patients may be asked to do a contact lens trial before surgery to test their tolerance for monovision.

#### Light Adjustable Lens (LAL):

A lens that can be adjusted after cataract surgery or refractive lens exchange (RLE to fine-tune the focus of the lens. Allows for customization for each eye based on the patient's individual visual needs and preferences. Provides the most accurate post-operative outcomes for most patients, including those who've previously had laser vision correction, or have irregular corneas (e.g., keratoconus or corneal scars. Must wear UV-filtering glasses after surgery until the light adjustment period is complete and the lens focus is locked in.



# WHAT TO EXPECT DURING SURGERY

Cataract surgery is quick and relatively painless. Topical anesthetic numbing drops and local anesthesia with IV sedation (fasting is required) will be administered. The surgeon will then gently insert the Intraocular Lens (IOL) and no stitches will be required.

# WHAT TO EXPECT AFTER SURGERY

Directly following surgery, protective eye wear is recommended, and you will need a friend or family member to drive you home. Mild discomfort is normal, but should disappear within 1 or 2 days. Eye drops are prescribed to encourage healing.

Everyday activities including moderate exercise can be resumed within a few days. Vision is usually blurry the first day and improves rapidly each day. Most people have legal driving vision within days and achieve complete visual clarity within 2 to 3 weeks.

With new advancements in the field of refractive surgery, many cataract patients can have better vision after surgery than they had before they developed a cataract. Following the procedure, many of our patients no longer need glasses.\*

\*Glasses are sometimes needed for fine print reading (e.g., prescription bottle or newspaper).

# FAQs

## DOES OHIP COVER CATARACT SURGERY?

Traditional cataract surgery is routinely and safely performed by Herzig Eye Institute surgeons. At Herzig Eye Institute, we offer cataract patients the option of Precision Refractive Cataract Surgery. OHIP covers a portion of this procedure. There are additional fees associated with advanced technologies, such as premium intraocular lenses and diagnostic tests which are not performed in traditional cataract surgery. Many cataract patients can have better vision after Precision Refractive Cataract Surgery than they had before developing a cataract.

### WILL I NEED GLASSES AFTER CATARACT SURGERY?

Precision Refractive Cataract Surgery is designed not only to provide excellent distance vision without glasses but also to reduce and, in most cases eliminate the need for reading glasses when possible. Many patients experience clearer vision after their procedure, than they had prior to developing cataracts.

## WILL I BE ABLE TO SEE IMMEDIATELY AFTER CATARACT SURGERY?

You will see after the procedure but it could take anywhere from 2 days to 3 weeks for your vision to stabilize. It is not unusual to have blurry vision for a few days after your surgery, as your eye is healing.

## WHEN SHOULD I CONSIDER CATARACT SURGERY?

When the ability to perform normal activities, like reading or driving, is compromised, it may be time to consider cataract surgery. Initial cataract symptoms can usually be managed with a stronger prescription for glasses. Getting cataract surgery is recommended when your quality of life becomes affected.

If you have developed a cataract, we'd like to help you understand the options available to you. With our advanced Precision Refractive Cataract Surgery technologies, your cataract(s) can be removed and your nearsightedness (myopia), farsightedness (hyperopia), astigmatism, and Presbyopia (loss of reading vision) can be corrected.

## WHAT SHOULD I DO IF I THINK I HAVE A CATARACT?

If you believe you have developed a cataract and are ready to consider surgery, there are a few steps you should follow to ensure you are thoroughly informed and understand the various options available to you. Make an appointment with your ophthalmologist, optometrist, family doctor, or with us at Herzig Eye Institute in **Toronto** (416-929-2020) or **Ottawa** (613-800-1680). A simple eye exam will identify the cataract. The surgeon will confirm the diagnosis and one of our Refractive Consultants will thoroughly educate you about your options. You will be provided with information about the procedure, risks, length of recovery, long-term results, and follow-up procedures.



# YOUR CATARACT CONSULTATION

At Herzig Eye Institute, cataract consultations are covered by OHIP.

During your cataract consultation, you will undergo advanced diagnostic testing, meet with your surgeon and a Refractive Consultant to answer your questions and determine which procedure is best for you.

Your eyes are complex and precious. There is no one-size-fits-all solution. We use only the most advanced and proven vision correction technology to ensure we offer the best and safest option to you.

## Book your consultation here



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150 Bloor Street W, Suite 210 Toronto, ON M5S 2X9 (416) 929-2020 1730 St. Laurent Blvd, Suite 600 Ottawa, ON K1G 5L1 (613) 800-1680

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