

A guide to your cataract surgery at St. Joseph's Hospital



In this booklet you will find valuable information that will help you understand your options for cataract surgery.

Please read this booklet and bring it with you on the day of your surgery and to any appointments.

A-SCAN (EYE MEASUREMENT) APPOINTMENT:

Date and time: _____

Location:

- Pre-surgical screening or admitting appointment, G.A. Huot Surgical Centre, St. Joseph's Hospital C1-300 (Zone C, Level 1, Room C1-300)

REGISTER AT SURGICAL CENTRE ADMITTING (C1-300) FOR A-SCAN

If you are scheduled for A-Scan or Lenstar (eye measurements) do **NOT** wear soft contact lenses for two days (hard contact lenses for seven days) before your appointment.

SURGERY APPOINTMENT

Date of surgery: _____
Time of check-in: _____

Date of surgery: _____
Time of check-in: _____

Location:

Cataract Suite, St. Joseph's Hospital B2-602 (Zone B, Level 2, Room B2-602)

G.A. Huot Surgical Centre, St. Joseph Hospital (Operating Room) C1-300 (Zone C, Level 1, Room C1-300)

***If you must cancel your surgery, please call your ophthalmologist's (eye surgeon) office as soon as possible.**

DAY OF SURGERY IMPORTANT REMINDERS

Your surgery may be cancelled if the instructions below are not followed:

- Do **NOT** take pills for your diabetes or insulin the morning of the day of procedure.
- Take all other morning pills with a sip of water.
- Your driver needs to remain with you at the hospital, in the adjacent waiting room, during your stay. A contact name and number for this person must be provided. You will not be allowed to go home alone by taxi and or bus.
- When you return home you need to have a responsible adult stay with you overnight.

* Prepare to be at the hospital for most of the day and bring snacks, beverages and medications, oxygen tank as required.

EATING AND DRINKING BEFORE SURGERY

- You are encouraged to drink clear fluids up to three (3) hours before your scheduled arrival time in the cataract suite.
- Clear fluids include water, apple juice, cranberry juice, black coffee or tea. (You may add sugar or sweetener.)
- DO NOT eat or drink any solid foods and liquids that are not listed above after 12:00 midnight the night before your surgery. This includes all food, dairy products and orange juice

BEFORE SURGERY CHECKLIST

- Take your eye drops as directed by your surgeon in the eye that will be operated on.
- Remove contact lenses at least three days before surgery.
- If you require an interpreter, accessible care or have any special needs please inform your surgeon's office. Information on accessible care at St. Joseph's can be found on our website at:
www.sjhc.london.on.ca/accessibility
- Shower and wash your hair before surgery.
- Avoid alcohol and smoking for at least 24 hours before and after your surgery.

MEDICATIONS

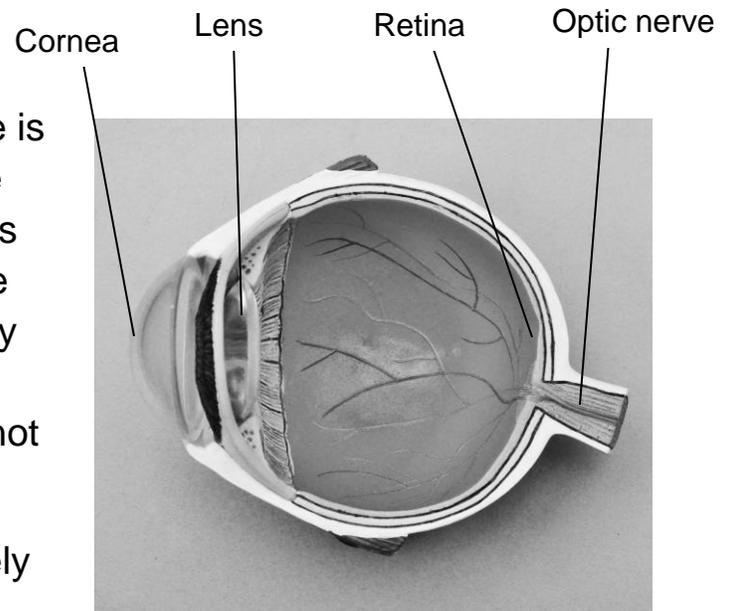
To ensure your care is as effective and safe as possible please bring all your pill bottles / medications in their original containers with you on the day of your surgery and complete the medication history sheet provided.

What is a cataract?

The eye is like a camera. In a camera there is a lens that focuses images onto film. Inside your eye there is a lens that focuses images onto a structure called the retina. As people age the lens in their eye can become cloudy and hard. This is known as a cataract. A cataract is not a film over the eye and it is not a growth.

In addition to aging, cataracts are more likely to happen if you have:

- Previous eye injury or eye surgery
- Diabetes
- Long term use of certain medications especially oral steroids , or as eye drops, inhaled steroid puffers, or steroid creams used around the eyes not proven
- inflammation in the eye (known as iritis)
- Previous radiation on your head or neck
- Smoking
- Exposure to ultraviolet rays from the sun
- Poor nutrition



Normal lens



Lens with cataract

Children can be born with cataracts or develop them at an early age because of:

- No known reason, which is most common Genetic disorders such as Down's syndrome
- Exposure to German measles (rubella) while in the womb
- Hereditary factors

Cataracts do not spread from one eye to other. Normally people have cataracts in both eyes. Cataracts can be worse in one eye than the other.

Cataracts can develop slowly over several years or rapidly over a few months. Symptoms of a cataract can include:

- Foggy vision
- A decrease in ability to see far distances
- Glare from lights, particularly at night and especially from oncoming headlights
- Difficulty in seeing street signs and traffic lights
- Double vision or multiple vision in one eye
- White pupils (in advanced stages of cataracts)

How are cataracts diagnosed?

Cataracts are diagnosed during an eye examination with your optometrist, family doctor or ophthalmologist (eye surgeon). If you have cataracts you will be referred to an eye surgeon. Eye surgeons are doctors who specialize in ocular disease and eye surgery.

At your first appointment your eye surgeon will enlarge (dilate) your pupils using special eye drops. Your surgeon will examine your eyes with and without your glasses on and take measurements.

How are cataracts treated?

Surgery is the only way to remove a cataract. The surgery is performed as an outpatient procedure. Generally a cataract should be removed when it

interferes with your daily activities, or when vision decreases below the driving standards of 20/50 with both eyes open and wearing the best corrective lenses (glasses).

Vision is measured using an eye chart that shows letters from large to small. "Normal" vision is 20/20. If your vision is 20/50, you see the same line of letters at a distance of 20 feet that a person with 20/20 vision would see at a distance of 50 feet.

What if you choose not to have cataract surgery?

It is your choice whether or not to have cataract surgery. Your eye surgeon will discuss all of your options with you before your surgery. If you choose not to have cataract surgery, your vision may get worse as the cataracts progress. Your eyeglasses may not be able to help the vision loss caused by your cataracts.

What happens during a cataract surgery?

During your cataract surgery your eye surgeon will make a small opening in your eye. Through this opening they will remove your cataract (cloudy lens) with a machine designed to break the lens into small pieces. The lens will be taken out by gentle suction. The back wall of the cataract is left intact. The lens will be replaced with an artificial lens called an intraocular lens implant (IOL). The opening made for surgery usually heals without stitches, but in some cases very fine stitches may be needed.

Will you be awake during your cataract surgery and will you feel pain?

To make you more comfortable during your surgery your eye surgeon will numb your eye with either drops or a freezing gel. You will be given light intravenous sedation to ensure you do not feel pain. You will be awake during your surgery. There are risks to having sedation. Please discuss this with your eye surgeon. You may feel some pressure during surgery but should not feel any pain.

Will your vision improve after cataract surgery?

Your eye surgeon will advise if and how much your best corrected vision will likely improve after surgery. This will be based on your eye exam before surgery. Sometimes vision does not improve as much as planned. Cataract surgery will only restore the vision loss caused by the cataract. You may still need glasses and/or contact lenses to see far distances clearly after your surgery. Most people will require reading glasses. Cataract surgery does not restore vision loss from pre-existing conditions such as glaucoma, retinal detachment, diabetes, age related macular degeneration (AMD) or dry eyes.

Can cataracts cause you to go blind?

Cataracts do not cause complete blindness. Vision lost because of your cataracts can be recovered after a successful cataract surgery.

If you have questions on how you can further improve your vision after cataract surgery, discuss them with your eye surgeon.

How much do you have to pay for cataract surgery?

The Ministry of Health and Long-Term Care (MOHLTC) insure cataract surgery and intraocular lens (IOL) insertion. The eye surgeon, anesthetist, and hospital are not allowed to charge additional fees for cataract surgery if you have a valid OHIP card. MOHLTC mandates that no amount can be charged to the patient for the medically necessary IOL or eye tests associated with cataract surgery. There are, however, specialty tests and lenses that have additional costs associated with them. The eye surgeon must give the patient the option of receiving the medically necessary tests and IOL without charge.

How long do you have to wait to have cataract surgery?

The provincial wait time target for cataract surgery is 182 days. The 182 days begins from the date your eye surgeon confirms you need cataract surgery.

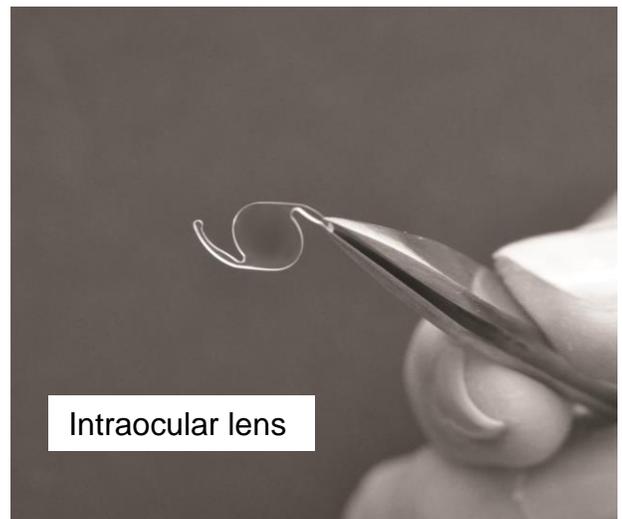
Your cataract surgeon will do his/her best to complete your surgery within this time frame. If your surgery cannot be completed within 182 days your surgeon will explain this to you and offer you the opportunity to be referred to another surgeon with a shorter wait time. However, you can elect to stay with your surgeon if you are willing to wait longer.

For more information visit

<http://www.health.gov.on.ca/en/public/programs/waittimes/default.aspx>

What is an Intraocular Lens Implant?

Intraocular lens (IOL) implants are artificial lenses used to replace the cloudy lens (cataract) removed from your eye during surgery. This intraocular lens is necessary to focus the light on the retina (the film on the back of eye). This lens implant is permanent and you will not feel it.



What lenses are available at St. Joseph's Hospital?

Standard intraocular lenses (IOL) are Alcon Acrylic Aspheric Lenses

St. Joseph's provides several choices for a standard lens. They are a high quality foldable, acrylic, one-piece intraocular IOL. Patients can choose between one that filters out ultra-violet light or one that filters out ultra-violet light and blue light. These are soft lenses and provide very good distance vision. These are the only IOLs covered by OHIP.

Specialty Intra-Ocular Lens Implant:

There are specialty IOL's available at St. Joseph's which are considered not medically necessary.

What are the differences between the standard and the specialty lenses?

The specialty lenses offered at St. Joseph's Hospital may correct certain optical conditions in addition to your distance vision, such as astigmatism and near vision, normally corrected with glasses after the placement of the standard lens implant. Because glasses can correct these conditions, these specialty lens implants are not considered medically necessary and as stated earlier are not covered by OHIP. Not everyone should use a specialty lens. Some lenses can affect your vision, including increasing glare and halos at night making objects difficult to see in the dark. It is important to discuss which lens is best for your vision needs with your eye surgeon. These specialty lenses are completely optional and your care will not be affected by your lens choice.

How much will you pay for a lens implant?

You only have to pay if you choose to have a specialty lens. You will be charged fees to cover extra costs of the lens and any additional testing needed. Please refer to the costs on page 12 and the Consent for Lens Options information sheet provided to you for details of costs.

These fees must be paid before your surgery in our business office located in Zone B, Level 0, Room B0-068 (519 646-6100 ext. 64239).

Your eye surgeon is required to:

- Explain to you all of the lens options available
- Provide you with an itemized invoice that shows additional fees you will be charged if you choose a lens other than the standard IOL
- Obtain your written consent to have a specialty lens implanted

What are the risks of having cataract surgery?

Cataract surgery, although very successful, is not without risk. Complications from cataract surgery are very rare. They can, however, cause poor or total loss of vision and, in severe cases, the loss of the eye. The more serious and/or more frequent complications include:

- Posterior capsule rupture and or vitreous loss: During surgery a hole can be torn in the back wall of the cataract. This is known as a posterior capsule rupture. If this happens you will need additional surgery to remove the cataract remnants. This surgery can be done during your cataract surgery but in some cases may require referral to a vitreo-retinal specialist. Your eye surgeon will decide if this is necessary. This complication is rare.
- Cystoid macular edema (CME): After cataract surgery fluid can collect on your retina. CME can usually be treated with medication to reduce inflammation in the form of eye drops, or steroid injections around or into the eye. Patients with diabetes or who have posterior capsule rupture at the time of their cataract surgery are more prone to develop CME.
- Refractive surprise: You may need a stronger prescription in your glasses than was planned. This happens when there is an unexpected change in your vision because of the power of the lens implant chosen for your surgery. See page 15 for information on lens power.
- Allergic reaction: Patients can have an allergic reaction to the drops given after surgery. This reaction can cause an itchy swollen eye until the drops are changed.
- Dropped nucleus: Sometimes during surgery parts of the cataract and rarely the entire cataract, can fall into the back compartment of the eye. This is a major complication and requires referral to a vitreo-retinal specialist and more surgery being done.
- Supra-choroidal hemorrhage: In rare instances bleeding can start inside the eye during or after cataract surgery. This is generally unpredictable and can be treated with surgery.
- Corneal decompensation: The clear surface of eye is called the cornea and it fits the eye just like the crystal of a watch. The cornea can become

cloudy after cataract surgery and may require further treatment or surgery. In very rare cases it requires corneal replacement.

- **Detached retina:** A detached retina is a rare complication where the retina lifts from the inside back wall of your eye, just as the liner of a swimming pool lifts off if there is a hole in the liner. Detached retinas can be treated with surgery. The risk of having a detached retina increases if you are nearsighted (nearsighted means you can see images close to you clearly). In some cases detached retinas can occur weeks, months or even years after cataract surgery.
- **Endophthalmitis:** One in 5,000 cataract surgery patients will develop a painful infection inside the eye. This is a very serious complication and might lead to loss of vision in the eye and in some cases loss of the eye itself. When you are discharged home after your surgery, your surgeon will discuss the symptoms that might suggest the onset of the infection. If they develop you should call your surgeon immediately or go the Emergency Department as soon as possible.
- **Dislocation of the implant:** The lens implanted in the eye can move out of position and may need repositioning through follow-up surgery.
- **Posterior capsule opacification:** The back wall of the cataract, which is left intact, can become cloudy causing blurred vision months to years after cataract surgery. This may need to be cleared with laser surgery.

Your eye surgeon will discuss the potential risks and complications of cataract surgery with you, the risks of not having the surgery, and the costs and any concerns associated with the use of specialty lenses. You have the choice to proceed with surgery or decide not to have surgery.

If you have any questions please ask your eye surgeon.

Intraocular Lens Options

1. AcrySof IQ Acrylic Aspheric IOL (Alcon)
 - Monofocal acrylic “wave front” one-piece IOL
 - Optical design reduces blur (spherical aberration) and enhance contrast sensitivity
 - You have the option of selecting an IOL that filters out ultra-violet and blue light or an IOL that filters out ultra-violet light only
 - **Patient cost: None – covered by OHIP**

2. Tecnis One IOL (AMO) –This is not our standard IOL
 - Monofocal acrylic “wave front” one-piece IOL
 - Optical design reduces Blur (spherical aberration) and enhances contrast sensitivity
 - Filters out ultra-violet light
 - **Patient cost: \$50.00***

3. AcrySof Toric IOL (Alcon)
 - Monofocal acrylic one-piece IOL
 - May reduce corneal astigmatism
 - Filters out ultra-violet and blue light
 - **Patient Cost: \$ 510***

4. AcrySof ReSTOR Multifocal IOL (Alcon)
 - Multi-focal acrylic one-piece IOL
 - Filters out ultra-violet and blue light
 - **Patient Cost: \$ 887.00***

5. Tecnis Symphony (Abbott)
 - Multi-focal acrylic one-piece IOL
 - Filters out ultra-violet and blue light
 - **Patient Cost: \$1,110.00***

The prices you see in bold reflect a rebate for the standard IOL and is your additional cost.

****Fees listed are subject to change without notification***

Additional information on multi-focal and Toric IOLs

- Multi-focal IOLs are designed to give good vision for both distance and near needs.
- The aim is to reduce the dependency on glasses after cataract surgery, but may not eliminate the need for glasses for best vision.
- Not all patients are candidates.
- Best results are obtained when both eyes have multi-focal IOL's implanted.
- There is risk of glare and halos at night and often a significant adjustment period is required.
- If you have astigmatism, where your eye is not spherical like a ball, but elongated like a football, you will require specialty IOL implants to achieve good vision. Astigmatism can be treated with glasses, contact lenses, laser corrective surgery and/or through surgery.
- The standard lens offered for cataract surgery and paid for by OHIP does not help with vision problems arising from astigmatism. The Toric IOL option can reduce your astigmatism but may not eliminate it completely.

PREPARING FOR YOUR SURGERY

Tests you need to prepare for surgery

Eye measurements

When the natural lens in your eye focuses images on your retina, this is called the power of the lens. Your surgeon needs to take two measurements of your eye to find what power your new lens implant should be, the length of the eye from front to back and the amount of curvature of the front surface of the eye.

These measurements can be performed manually using sound waves to measure the length of the eye with a machine called an A-Scan, and an instrument called a keratometer to measure the curvature of your cornea.

Alternatively, both measurements can be performed automatically and simultaneously with a device called the Lenstar, which uses light (laser) to measure the length of your eye.

One of these measurements is required for all patients undergoing cataract surgery.

Both the A-scan and the Lenstar are very good at predicting the power of the lens implant you need, however sometimes measurements can be wrong. This can mean an incorrect lens implant power is chosen and an incorrect lens implanted. If this happens your vision without glasses after surgery may not have improved to the extent your eye surgeon discussed and planned with you. Glasses may correct the problem if minor but further surgery might be required to replace the lens implant with the correct one.

A-Scan/manual keratometry is covered by OHIP for both eyes. Lenstar, which is optional, has a hospital fee of \$75 and physician fee of \$60 for one or both eyes.

Consent

Before surgery you must provide your eye surgeon with a written consent to perform your cataract surgery. Your surgeon will provide you with the form. You must also sign consent for the purchase of specialty lenses if you choose to use them and for any tests and fees associated with specialty lenses.

THE DAY OF YOUR SURGERY

St. Joseph's respects all cultural and religious backgrounds. You may be requested to alter or remove head coverings for the safety of your eye and positioning of your head for surgery. You will be informed of this before surgery and asked to perform that task yourself.

What to bring with you the day of your surgery?

- This booklet and completed medical history sheet
- Your Province of Ontario Health Card (OHIP card)
- A pair of sunglasses
- Your support person

- A case for your eye glasses
- Your eye drops

Please remember to:

- Remove all jewelry including: rings, watches and chains
- Wear loose fitting clothing to the hospital
- Remove makeup and avoid scented perfumes
- If you wear a hearing aid, **please do not remove it**
- You can wear dentures and hair pieces

Do not bring any valuables with you on the day of your surgery, including:

- Jewelry
- Credit cards
- Watches
- Cell phones
- Electronic items
- Large amounts of money
- Expensive items

You will be provided a locker for other belongings. St. Joseph's is not responsible for lost or stolen articles.

Please call your eye surgeon's office if:

- You develop a fever, cold, flu, or eye infection within three days before your surgery
- You are taking antibiotics within 48 hours before your surgery

AFTER SURGERY

For approximately 20 minutes after your surgery you will be monitored in our recovery room. You will be provided a light snack and your follow-up appointment will be scheduled. **Your eye surgeon will examine you on the same day or the next day.** You will also be provided with a one week follow-up appointment. It is very important that you keep these appointments.

How to care for your eye after surgery

To protect your eye:

- Wear sunglasses or prescription glasses when you are awake.
- Wear the shield provided when sleeping for one week after surgery or as advised by your eye surgeon.
- Dampen a clean washcloth/tissue with warm water and gently wipe the secretions from your eyelid and eyelashes as needed. Do not put pressure on the eye.

It can take up to one month after cataract surgery for your eye to fully heal and be ready for new prescription glasses. Continue to wear your old glasses as usual. When putting your glasses on, hold them by tip-ends of the arms to prevent injury to the eye.

Eye drops

You will need to apply the eye drops prescribed by your eye surgeon for a few weeks after surgery. You should apply the eye drops while lying down or sitting. Wait two to five minutes between different types of drops. Use the eye drops during the daytime - you do not have to wake up in the middle of the night to use the eye drops.

Steps to applying eye drops:

- Wash your hands
- Read the label ensuring you have the right medication
- Gently clean your eye and eyelid with a tissue
- Shake the bottle
- Tilt your head back
- Pull the lower eyelid down and look up to your eyebrow
- Squeeze the drops into your eye in the space between your lower eyelid and the eye ball (do not let the eyedropper touch your eye)
- Close your eye gently
- Wipe off any excess medication from your cheek (do not rub your eye)

What to expect after cataract surgery?

You may have slight discomfort including itching for the first 24 hours after surgery. This is normal. Severe pain is extremely unusual and should be reported immediately to your eye surgeon.

You may have bruising on your eye or eyelid. This will heal. It is also common to feel increased pressure in your eye on the day after surgery. Please notify your eye surgeon if you feel undue and continuing pressure in your eye at any time.

As only one eye is operated on at a time some patients will experience a feeling of being off-balance or dizzy. This may cause symptoms that require correction with glasses or cataract surgery in the other eye.

Before your surgery, you will receive a sedating medication and it is common to have temporary lapses of memory, slow reaction time and impaired judgment after surgery.

For four to six weeks after surgery you may have:

- Blurred vision
- Secretions from the eye
- Itching
- Tearing
- Feeling that something is in your eye (i.e. an eyelash or grain of sand)
- Sensitivity to light and wind

What not to do after surgery:

- Do not bump your eye.
- Do not rub your eye – rubbing can cause problems with your incision and prevent proper healing.
- Do not drive or operate any type of motorized vehicle for at least 48 hours after surgery or until cleared by your surgeon. You **MUST** ask your eye surgeon when you can start driving.
- Do not play sports for three weeks or swim for four weeks.
- Do not expose yourself to dusty/dirty environments for two weeks.
- Do not work near any machinery for three weeks.

- Avoid making important decisions or signing legal documents for at least for 24 hours after your cataract surgery.
- Do not lift more than 20 lbs of weight for about one week.

After surgery, you may:

- Read, watch TV and use a computer as long as it is comfortable for you.
- Bend down to tie your shoes.
- Bath or shower during the first week, but avoid getting water directly in the operated eye. Let water run from the back of head and not the face and do not rub the eye to dry it.
- Go for a walk.
- Go to hair stylist but wear your eye shield to protect the eye.
- Perform light house work i.e. cooking and doing dishes.
- Return to work as recommended by your eye surgeon.
- Resume sexual activity/relations cautiously in about a week and wear an eye shield.

Warning signs to watch for

Please call your eye surgeon's office immediately if you experience any of the following:

- Pain in the eye – that is not relived with medication prescribed by your eye surgeon
- Sudden or progressive decrease of vision that is unexpected
- Increase in eye redness or secretions from the eye
- Severe nausea and vomiting
- Flashing lights, the look of cob webs and multiple floaters in front of the eyes

If it is after office hours or a weekend/holiday please call St. Joseph's switchboard at 519 646-6100 and ask for the eye resident on-call to be paged. Alternatively you can go an emergency department.

Please note that St. Joseph's is a teaching hospital and residents will be involved in parts of your care.

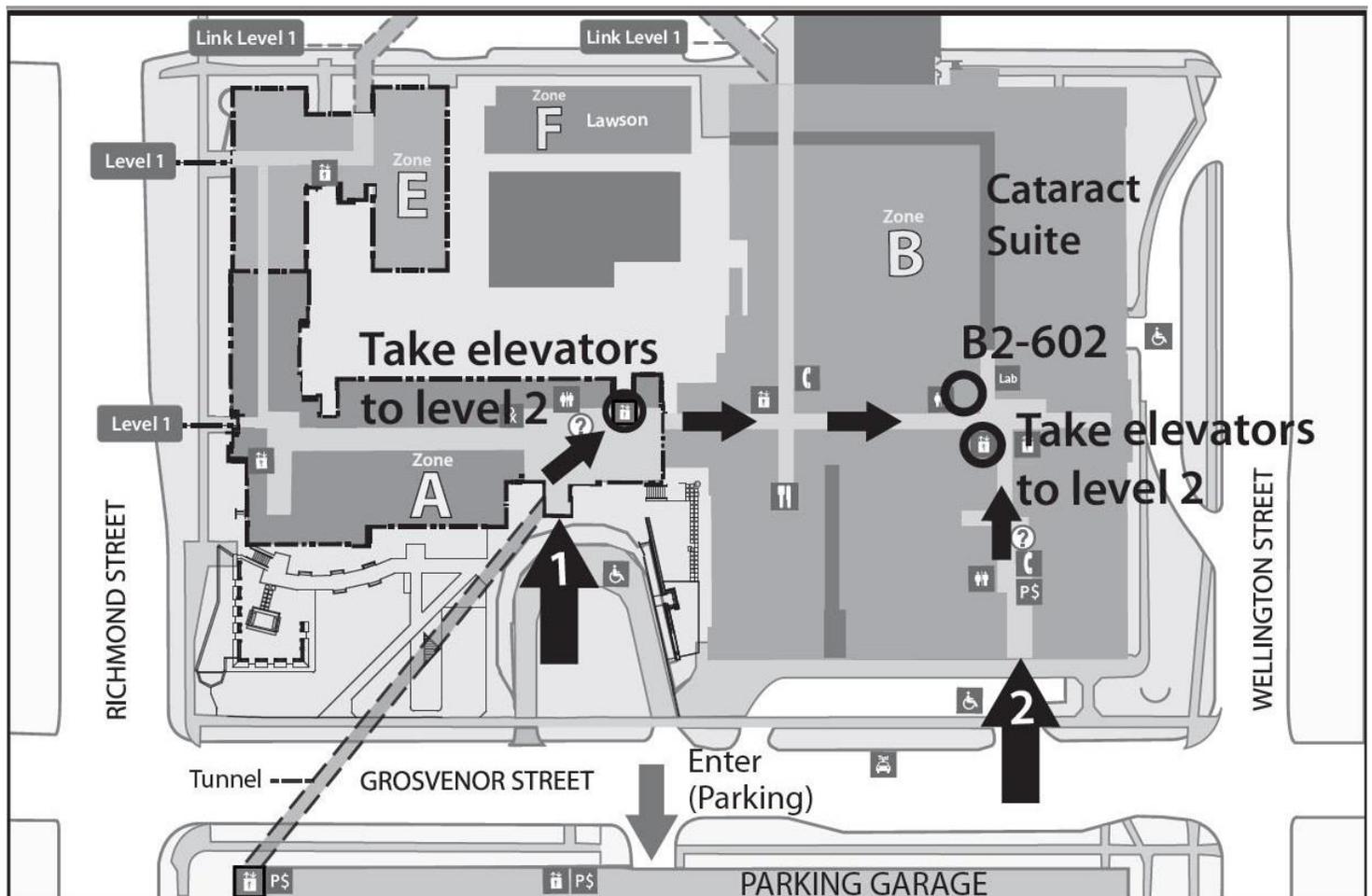
DIRECTIONS TO THE CATARACT SUITE - ROOM B2-602

Using Entrance 1

- Park in parking garage and enter the hospital through Entrance 1
- Once in the lobby turn right at information desk
- Take the first set of elevators immediately to the left of the information desk
- Go to level 2
- Turn left and walk down hallway until you reach the Cataract Suite

Using Entrance 2

- Park in parking garage and enter the hospital through Entrance 2
- Proceed straight ahead and you will see elevators on your left and right.
- Take Elevator 8, 9 or 10 to level 2 (B2)
- Exit from the elevator and turn right
- Walk to the end of this corridor to the Cataract Suite



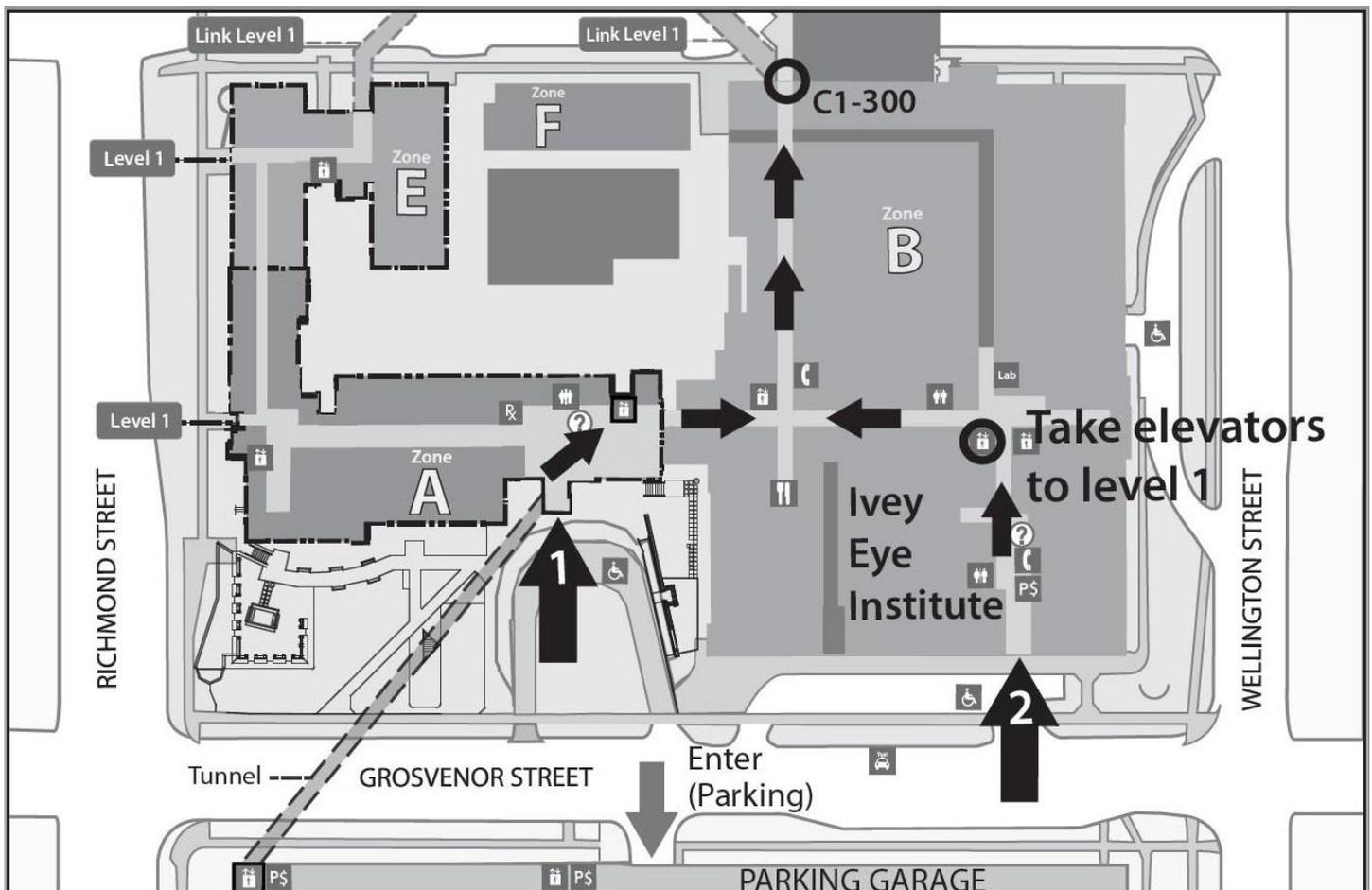
DIRECTIONS TO G.A. HUOT SURGICAL CENTRE - ROOM C1-300

Using Entrance 1

- Park in parking garage and enter the hospital through Entrance 1 Once in the lobby turn right at information desk
- Walk past the bank of elevators to the first corridor
- Turn left at that corridor
- Walk down corridor to the G.A. Huot Surgical Centre

Using Entrance 2

- Park in parking garage and enter the hospital through Entrance 2
- Walk down the corridor and take elevator 8, 9 or 10
- Go up to Level 1
- Exit elevator, turn left and walk past the Ivey Eye Institute registration area to the first main corridor
- Turn right at that juncture and walk down the hall until you see the G.A. Huot Surgical Centre



Parking

Parking/accessible parking is available in the parking garage. The parking garage entrance is located on Grosvenor Street, across from the hospital.

Please go to our website for parking rates:

www.sjhc.london.on.ca/st-josephs-hospital/parking

Parking fees are subject to change.

Parking pay stations are located on the ground floor of both elevator lobbies located at the north-west and north-centre area of garage.

There are also pay stations inside Entrance 1 and 2 in the hospital.

You must pay for parking before you leave the parking garage.

Cataract Surgery Video

For more information feel free to view the cataract surgery video at

www.sjhc.london.on.ca/ivey-eye-institute/patient-information/cataract-surgery/video.

The video steps patients through what to expect on the day of surgery. You can also use your smart phone with QR code reader to scan the code below.

Cataract Surgery Video:



Ivey Eye Institute:



This booklet has been developed by

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Dr. Merchea would like to acknowledge the contributions of Dr. Chris Canny.

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