Welcome to our Clinic

What is Glaucoma?

There is not one definition that is agreed upon by all doctors but typically glaucoma is comprised of a group of diseases that are characterized by high eye/intraocular pressure (IOP, pressure within the globe of the eye) and/or damage to the optic nerve and/or loss of visual function. Some people may have a high IOP but no other signs or symptoms; this is typically called Ocular Hypertension (OHT). People with ocular hypertension still need to be monitored regularly as it is a risk factor for glaucoma. Regular visits are required to test for any damage occurring to your eyes to try and prevent vision loss. Glaucoma is also called the "sneak thief of vision" because there generally is not any pain and any vision loss is not often noticed until it is quite advanced. Glaucoma is not curable but it can be controlled with regular visits and consistent use of medications if required.

What tests are done to diagnose or monitor glaucoma/OHT?

- 1) Vision: Your best-corrected vision (ie. with your glasses) will be measured at each visit.
- 2) Eye Pressure (IOP): An anaesthetic/freezing drop will be instilled in your eyes and then your eye pressure will be measured with an instrument that you will notice as a blue light coming close to your eyes. There will not be any puffs of air. This test will also be done at each visit. As eye pressure can fluctuate throughout the day, there may be some visits that require your pressure to be tested at multiple times throughout the day. Please remember to breathe normally during this test; holding your breath will make your eye pressure higher!
- 3) Visual Field: This test consists of you fixating at a central point straight ahead and pushing a button every time you see a flash of light. This test is important in determining if there has been any central or peripheral loss of vision. Visual fields take approx. 30 minutes to complete and our schedule for these is very full. We ask that you please ensure you arrive on time; being late may result in having to reschedule your test. There is also a mini-version of this test called an FDT which may be done.
- 4) OCT, HRT and DISC PHOTOS: All of these devices take images of the back of your eye (the retina) where your optic nerve leaves the eye to travel to the brain. OCT and HRT machines take many different measurements to try and detect if there is any damage occurring at this site. Drs. Crichton and Ford can then analyze the results, and together with what they see with a visual examination of the eye and the results of other tests, decide if any treatment is required to try and prevent vision loss before it occurs.
- 5) Slit-Lamp Examination: This is when the doctor looks at your eye through different equipment. Some visits may require drops to dilate (widen) your pupils in order for the doctor to get a better look at your retina. On average, dilation lasts approximately 3-5 hours and during this time your eyes will be sensitive to light and near vision may be blurry. You will want sunglasses for outdoors and you may be more comfortable with somebody else driving.

PLEASE NOTE: The doctors' can learn a great deal about the health of your eyes from the different tests described therefore in some cases you may not be required to see the doctor. Our staff will contact you to make an appointment once the doctor has reviewed the results.

How is Glaucoma/Ocular Hypertension treated?

The first course of treatment is generally with eye drops to lower your eye pressure. There are many different types of eye drops, some of which are used only once a day while others are needed more frequently. More than one type of drop may be needed to control your eye pressure at an acceptable level. If you are instructed to take more than one drop at a time, please wait ~5 minutes in between instilling drops so one drop does not just wash out the other. It is important that you try and take your eye drops regularly in order to best control your eye pressure; remember, that if your eye pressure is too high or not controlled, there is a greater risk that you may lose some of your vision.

If you have a type of glaucoma called Angle Closure Glaucoma or your eye drops are not adequately controlling your eye pressure, there are different types of surgery/laser which may be done to allow better circulation/drainage of the fluid within your eye. The procedures are done primarily under topical anaesthetic (freezing drops), only take a few minutes and for most people are generally painless. If surgery/laser is recommended, your doctor will explain the procedure suggested.

What is a Cataract?

A cataract is an opacity (cloudiness) of the lens located inside your eye. As the opacity changes or becomes more dense, your vision will become blurrier, colors may seem to fade, and your glasses prescription may change. The only way to remove the cataract is with surgery.

What does Cataract Surgery involve?

Cataract surgery means to remove the natural lens of your eye. This is done on an outpatient basis at a nearby surgery center. Your eye will first be "frozen" either with a needle or drops depending on circumstances, and then the doctor will make a small incision in the cornea (front part of your eye). Through this incision, the doctor will break up the natural lens (which is now your cataract) and remove it. Over 95% of patients will notice an improvement in their vision however it is important to note that while the percentage of risks during/after surgery are minimal, it is not zero.

The natural lens is responsible for $\sim 2/3$ of the power of your eye and thus must be replaced with an artificial lens which has some power. In order for the doctor to choose what power of lens to put in your eye, the curvature of your cornea (front part of your eye) and an ultrasound test called an "A-scan" will need to be done. (*soft contact lenses must be left out for two weeks prior to this test; hard or RGP contact lenses need to be left out for 3 weeks prior to this test). In some cases, an artificial lens may be chosen which will minimize the need for glasses at either distance or close range (NOT both), so you will need to decide what range of vision is most important to you. Please be aware that the artificial lens may move in your eye slightly as it heals so we cannot guarantee the prescription that will result. Surgery will change your glasses prescription and as it can take time for your prescription to stabilize, we recommend that you wait for 6 weeks after surgery before seeing your optometrist for new glasses.

If cataract surgery is recommended to you and you decide to proceed with it, more details regarding testing and surgery may be explained either by the doctor and/or staff.