The Glaucoma Journey – Part 3

So, you have never heard of glaucoma before and now you have been diagnosed with it. You have many questions you would like answers to. Concerns about your future eyesight raise the fear of blindness.

This article is Part 3 of a series of three where we look at ‘The Glaucoma Journey’. Part 1 explained what glaucoma is, who is at risk and the importance of early detection. Part 2 looked at how the diagnosis of glaucoma is made, what tests take place and the different types of glaucoma. In Part 3 we will look at the treatments available for those with glaucoma, why one treatment may be recommended over another and what decisions may require further consideration.

What is the most common form of treatment for glaucoma?

Eye drops are the most common form of treatment and come in different strengths and combinations. Drops can be varied to best suit the patient and type of glaucoma. Some people do experience side effects and it’s important to discuss with your eye specialist any new health problems or concerns that have developed since starting your eye drops.

There are different families of glaucoma eye drop medications. Within each family there may be more than one member.

Prostaglandin Analogues
Examples: Travatan, Lumigan, Hysite.

Prostaglandin analogues work by allowing better drainage of aqueous fluid out of the eye. The pressure in the eye is subsequently decreased. They are the newest family of glaucoma medications available. These eye drops are now the most commonly used drug in the developed world for glaucoma and have very
Carbonic anhydrase is an enzyme chiefly responsible for the production of fluid in the eye. So, inhibiting it will lower the intraocular pressure.

These drops contain a sulphur-based compound, but are unlikely to create similar allergic reactions as sulphur-based antibiotics can, as the chemicals in each are very different. Always ensure your eye specialist knows of any drug allergies you have, as caution would need to be taken if your reaction to sulphur was very serious. Side effects from these drugs can include a dry mouth, some stinging of the eyes, crusty eyelashes, and a bitter after taste.

**Combination drops** (Cosopt and Combigan, Duotrav)

These are drops that contain combinations of different medications. You have the advantage of getting the benefit of two different drops, whilst only having to remember to take one! These drops can offer an alternative for patients who need more than one type of medication. There may still be side effects relevant to the drug types contained in the combination drops.

**Miotics** (Pilopect)

Miotics are so named because they make the pupil smaller. They allow more aqueous fluid to drain from the eye. These drops are not widely used now, as they often cause side effects such as decreased night vision (due to the smaller pupil) and headaches.

Treatment for glaucoma is life-long and you will need to use your eye drops on a daily basis, continually. If you are having difficulties in putting in your eye drops, ask your eye specialist to demonstrate the most effective method. Glaucoma NZ has an information card on putting in eye drops.

Remember to inform your other doctors and health care specialists that you have glaucoma, and provide them with the names of your medications. In turn you should inform your eye specialist of any pre-existing medical condition and medication so this way everyone is in the picture.

**Are there other alternatives to eye drops?**

For some patients other treatments may be required in certain circumstances e.g. when eye drops fail to control the pressure, or are unsuitable for a particular reason. Your eye specialist will evaluate your condition and may make further recommendations for alternative treatments such as tablets, laser or surgery.

**Tablets** – in some cases tablets are used to treat glaucoma. They are most often used for short periods as a temporary measure until surgery can be performed.

**Laser Trabeculoplasty** – is performed at a slitlamp microscope similar to the one used in regular eye examinations. After instillation of anaesthetic eye drops, a focused beam of light is used to treat the drainage angle of the eye. This procedure makes it easier for fluid to flow out of the trabecular meshwork (the drainage pathway). The laser process takes about 10-15 minutes and does not require a hospital stay. Some patients may no longer need to use eye drops after this procedure.

**Laser Iridotomy** – is the treatment of choice for people with narrow angles or angle closure glaucoma. A laser beam is used to make a small hole in the iris which allows the fluid trapped behind the iris to drain more freely into the trabecular meshwork (the drainage pathway) of the eye. Topical anaesthetic drops are applied prior to the procedure which takes about 5-10 minutes and no hospital stay is required. Anti-inflammatory eye drops may be recommended for the next few days after the iridotomy.

**Surgery – trabeculectomy** is the most common form of surgery for glaucoma and is performed when the eye pressure is not being controlled by drops or laser treatment. In a trabeculectomy the surgeon creates a new channel to improve the drainage of fluid from the eye which reduces the pressure.

After surgery antibiotic and anti-inflammatory eye drops are used in the eye that has been operated on for up to six weeks or more. Often the vision after surgery is blurred and may remain that way for several weeks. In the vast majority of cases the vision returns to its pre-operative level by six weeks.

**Tube-shunt surgery** such as a Molteno implant is also an option in cases where trabeculectomy surgery has not been successful. This procedure involves placing a flexible plastic tube with an attached silicone drainage pouch in the eye to help drain aqueous fluid from the eye and lower the pressure.

Remember ongoing management of glaucoma is vital to retaining your eyesight so it’s important to agree on a regular frequency of check-ups with your eye specialist and stick to that schedule. This will allow your glaucoma to be monitored so the most appropriate decisions are made about your treatment options.

For more information on the above treatments contact Glaucoma NZ phone 0800 452 826 or visit www.glaucoma.org.nz

Any feedback you have on these articles would be appreciated – it is your stories that help others realise they are not alone in their concerns and fears as they face this lifelong potentially blinding disease and make decisions as to how to manage it.

**Moving House?**

Don’t forget to advise Glaucoma NZ of your new address.
A Patient’s Experience
LPI (Laser Peripheral Iridotomy)
by Jennifer Barraclough

I had not noticed anything wrong with my eyesight so it was quite a shock when a routine test showed that my vision was not as good as last year, and that my intra-ocular pressures had increased to well above the normal range. I was diagnosed as having ‘narrow angles’ between the lens and the iris of both eyes, blocking the free drainage of aqueous fluid, with a danger of progression to either acute or chronic glaucoma.

My optometrist referred me to an eye specialist. She gave me the choice of either having regular repeat observation, or a laser peripheral iridotomy (LPI) to create a tiny hole in each iris, allowing the fluid to circulate. The information sheet described LPI as ‘an extraordinarily safe procedure’ from which complications are very rare. Inevitably, an internet search produced a mixture of opinions about this operation, but most reports were positive and I decided to go ahead with it in the hope of avoiding further deterioration.

On the day, a technician prepared my eyes with two kinds of drops: a local anaesthetic, and pilocarpine to constrict the pupils. Then I had to wait about half an hour, during which time my vision was slightly blurred, and I felt rather shaky probably due to a combination of pilocarpine and nervousness.

The operation itself took only a few minutes. My chin and forehead rested forward against a frame while the surgeon, seated opposite, applied more local anaesthetic to my right eye and inserted a special lens to prevent blinking and to magnify her view of the iris. She asked me to look straight ahead and then applied a series of laser shots in quick succession. I perceived these as starbursts of red light. They were uncomfortable rather than painful.

The same procedure was repeated on my left eye, then after a short rest in the waiting room I was ready to go home, escorted by my husband. I would not have been allowed to drive myself after having had both eyes treated on the same day, although driving is permitted for patients who have had only one eye done.

It was a very pleasant surprise that I experienced no after-effects whatever, and did not feel the need to use the anti-inflammatory eye drops I had been given. Having expected to need a longer recovery period, I had arranged to cut down on reading, writing, computing or watching movies for a few days. This still seemed like a good idea, and I found some pleasant things to do instead, but it was a challenge to find activities which did not require use of the eyes and this made me very conscious of the importance of sight.

I would say the worst aspect of LPI is the anxiety which inevitably surrounds an operation on such a sensitive and valuable part of the body. The actual procedure is quite minor. One friend of mine, who had it done three years ago, had told me not to worry because it was ‘almost a non-event’ and I discovered she was right.

At my follow-up appointment I was told that the procedure had been very successful and I did not need to continue attending the clinic.

Working with your Doctor

If you have been diagnosed with glaucoma, obtaining treatment and following your treatment regimen are essential to preserving your eyesight. A good relationship with your eye doctor is also very important.

Don’t be afraid to ask questions! The most recent diagnostic and treatment advances won’t help if you don’t obtain and follow the advice from your doctor.

Ask questions about the medication, results and possible side effects. If the side effects are intolerable, let your doctor(s) know as soon as possible so they can work on finding a more suitable medication.

Here are some specific questions you can ask to help you gain a better understanding of your condition:

The Basics
What type of glaucoma do I have?
Did something cause my condition? If so, what?
How will my vision be affected now and in the future?
Is it hereditary? What should I tell my family about my condition?
What is my expected outcome?

Treatment
What are my treatment options?
Which ones are most appropriate for me? Why?
What could happen without treatment?
What medications do you recommend? Will they interact with any other medications or health supplements I am taking?
How long will this treatment last?
How will I know if the treatment is working?
How often will I need checkups?

Lifestyle Changes

Should I follow a special diet?
Is there any type of exercise that could help my condition?
Are there any particular activities that I should avoid?
What special precautions should I take when working or driving?

Support

Join Glaucoma NZ and keep informed.

If you have been recently diagnosed with glaucoma, ask a friend or family member to come with you to your appointment and help you capture all the details.

Research Grant for Summer Student

University of Otago student Peny Lin has been awarded a grant by Glaucoma NZ to undertake a research project at the Department of Ophthalmology, Auckland University over the summer break.

The research project will focus on Connexin 43 changes in Open Angle glaucoma and the role of astrocytes in glaucoma. Astrocytes are cells that support the retinal ganglion cells which are the cells that transmit the visual signal from the eye to the brain. They are the cells that are damaged in glaucoma.

Originally from Auckland, Peny is currently based in Otago in her second year of a Bachelor of Medicine and Surgery degree. Peny’s interests include playing the piano, especially baroque and classical music. She places high importance on being physically fit and enjoys kickboxing and long distance running. In the future Peny hopes to work for the New Zealand Army specialising in the surgical area of medicine.
July 2011 Annual Awareness Appeal

Awareness of glaucoma rises to a new level

Glaucoma NZ would like to extend a big thank you to all those who supported the 2011 July Annual Awareness Appeal.

It has been extremely encouraging to have so many participants willing to help out. Optometrists and ophthalmologists responded by taking donation boxes to display at their practices, as well as some making a donation from eye examinations undertaken during July. The support nationwide of pharmacies, ASB branches and Grey Power Association members also made a significant difference.

A large amount of media exposure was generated with articles and promotions appearing in a variety of national magazines and newspapers including Family Health Diary, AA Directions, NZ Doctor and local papers.

GNZ awareness posters featured inside NZ Buses around Auckland, in ASB branches, and many participants took the opportunity to have special glaucoma awareness days and displays in-house.

This year, 75 year old Doug Wilson’s epic walk from Cape Reinga to Bluff in support of glaucoma took the level of awareness to a brand new high. His journey and message was covered by almost every local paper in the country. In response to the increased media, GNZ’s 0800 advisory line kept staff busy with members of the public wanting to know more about glaucoma. A large number of these callers were subsequently advised to have their eyes examined.

Again, Glaucoma NZ appreciates all your efforts during the 2011 July Annual Awareness Appeal and your continued support throughout the year working towards eliminating blindness from glaucoma.

Thank You!

Big strides in glaucoma fight

Seventy-five-year-old Doug Wilson has been enjoying the north’s sights as he walks the length of the country.

The Tauranga Grey Power president is Nordic walking from Cape Reinga to Bluff to raise money and awareness for glaucoma.

Glaucoma is the leading cause of preventable blindness in New Zealand.

The vision loss often goes undetected but blindness can be prevented with early treatment.

Doug was diagnosed with glaucoma in one eye last September and has had successful eye-drop treatment.

He says he improved from 20 percent vision in the eye to about 90 percent.

Great sight: Doug Wilson, 75, is on a mission for Glaucoma NZ

Doug says New Zealanders are on the leading edge of preventing glaucoma blindness but Glaucoma NZ gets no government funding and relies on donations.

Doug has encouraged every Grey Power association in New Zealand to put out a collection box during July, which is Glaucoma Awareness Month. He also decided to do the walk, which he expects will take 55 days.

“If you even think you might have glaucoma, get it tested and get treatment. The sooner you get treatment the better.”

Eyelights editor’s note - Doug completed his journey safe and sound, arriving in Bluff in the first week of August. Well done Doug!!

Close Call

If his wife hadn’t suggested he switch from glasses to contacts, Turangi police officer Brendon Young might never have gone for the optometrist visit that found he was on the verge of losing his sight.

Turangi police officer Brendon Young says it was his wife Kas-Sandra who saved his eyesight.

That’s because in 2006 when Brendon and Kas-Sandra were newly married, he was then 38 years old, working as a printer and considering applying for the police.

Brendon wore glasses occasionally for short-sightedness, and Kas-Sandra suggested that if he were to become a police officer, he should switch to contact lenses. So Brendon went along to see his optometrist, and to his surprise, the optometrist picked up that he had the early stages of glaucoma.

Brendon was unconcerned and went off to police college as planned, but when he returned to the optometrist to have his contact lenses checked after six months, the optometrist discovered the glaucoma had significantly progressed.

After a second opinion, Brendon was referred to an ophthalmologist who discovered that he was on the verge of irreparable sight loss in both eyes. That came as a shock. Brendon says he wasn’t initially worried about his glaucoma because although he’d heard of the disease, he didn’t know much about it and there was no history of it in his family.

“It wasn’t until my first appointment with my ophthalmologist that I realised how close I’d come to losing my eyesight.”

“I said to Kas at the time I’d rather go deaf than lose my eyesight. You could see your family grow up, drive, read, lip-read, but if you go blind, there’s not a lot you can do ... I was very worried at the time.”

Brendon says it was lucky he had gone to the optometrist at all and if he hadn’t gone when he did, his eyesight would have begun to disappear without him even noticing. There are different types of glaucoma, but Brendon’s was caused by the ducts in his eyes becoming blocked, which puts pressure on the optic nerve.

For the last five years he’s kept the glaucoma at bay with daily eye drops and travels to see his ophthalmologist every six months for regular checks.

“I have what they call open glaucoma and you
don’t realise that you have it. There’s no tell-tale signs and eventually your vision starts to close in and you lose your peripheral vision.”

Because Brendon’s glaucoma was detected just in time, his vision hasn’t been damaged and it hasn’t affected his police duties. He’s religious about remembering his eye drops every day, saying they’re virtually the first thing he packs when he goes away.

And he’s grateful to Kas-Sandra for sending him along to the optometrist in the first place, which has preserved his sight, allowed him to pursue a police career and enjoy being a dad to his two young sons.

“If it hadn’t been for Kas saying to me ‘you should get contacts’, I probably would have made do with the glasses ... I’m quite adamant that if she hadn’t suggested it and I hadn’t gone for the test, I don’t know how much longer it would have taken, but if I wasn’t blind by now I’d certainly be very much visually impaired to some extent.” Knowing how close he came himself, Brendon urges everybody to have their eyes checked every few years, even if they don’t wear glasses or contacts.

Glaucoma New Zealand recommends that everyone has an eye examination for glaucoma by age 45, and every five years after that until 60, and three-yearly after 60. However if people notice changes in their vision at any age, they should have it checked out. The risk of glaucoma also increases if there is a family history of the disease.

Glaucoma is the number one cause of preventable blindness in New Zealand, and 50 percent of those with the disease don’t know they have it. That’s because there are usually no symptoms until vision has already been damaged.

For more information visit www.glaucoma.org.nz or phone 0800 452 826.

Public Meetings
Glaucoma NZ’s free nationwide public meetings continue to be extremely popular and well attended. These meetings are an invaluable way of raising awareness of this potentially blinding disease amongst the wider community, whilst conveying vital information to those with glaucoma and those with an interest in glaucoma.

The meetings are hosted by a Glaucoma NZ representative together with an ophthalmologist who gives an in-depth hour long presentation. An opportunity for the audience to ask questions is given, followed by refreshments.

This year’s itinerary has included a number of locations outside of the main city centres which has been greatly appreciated by those who have attended.

To date in 2011 meetings have been held in Thames, Nelson, Whangarei, Palmerston North, Havelock North, South Auckland, Kapiti Coast, Central Auckland, New Plymouth, East Auckland, Snells Beach and Taupo.

Upcoming Meetings:
5th November – Takapuna – 10am
Channelview Lounge, Mary Thomas Centre 3 Gibbons Road, Takapuna, Auckland

12th November – Gisborne – 10am
Quality Hotel Emerald, 13 Gladstone Road
Please visit www.glaucoma.org.nz to keep up to date with our Public Meeting Programme. Glaucoma NZ members will receive personal invitations for meetings in their area.

The meetings are open to any member of the public wanting to know more about glaucoma – invite your family and friends to attend.

We look forward to seeing you there.

Can animals get glaucoma? My cat doesn’t seem to be seeing too well and one eye appears to be cloudy.

Glaucoma is the most common cause of blindness in cats and dogs. Glaucoma in pets is more painful than glaucoma in humans. It is most likely to present as the angle closure type of glaucoma. This discomfort can result in lethargy, less desire to play, irritability, or decreased appetite. It is important for the owner to recognize these signs, as dogs and cats lack the ability to verbalize their pain.

The usual presentation is an animal with a blind, painful, red eye with a blue or cloudy cornea. Unfortunately glaucoma can look like a simple "conjunctivitis", so if your pet has any of these signs, please get it checked out by your veterinarian.

Early detection of glaucoma may be difficult because in animals these subtle vision problems are very hard to identify. Unfortunately many of the cases of glaucoma seen by veterinarians are well advanced by the time of the first visit.

Could stress be a factor in causing elevation of eye pressure? Are there any other lifestyle factors that contribute to increased eye pressure?

It is well known that stress does have an effect on many parts of the body and can contribute to a variety of illnesses. However, with regard to eye pressure whilst there is some anecdotal evidence to suggest that stress could be a factor, this has yet to be substantiated in scientific controlled trials.

Other lifestyle factors which can contribute to increased eye pressure are:

Drinking large quantities of water (one litre within 15 minutes) may result in temporary significant increases in eye pressure.

Steroids can also raise eye pressure in some people. Usually this reaction occurs with steroid eye drops, but it can happen with any form of steroids including skin creams (especially applied around the eyes), tablets and inhalers.

The inverted position in yoga has been associated with significant increases in eye pressure in some people and could lead to worsening of glaucoma.

Drinking too much coffee and alcohol are also known to elevate eye pressure.

For more info on lifestyle recommendations, please visit www.glaucoma.org.nz, or phone 0800 452 826.

Questions for the Public Mailbox are welcomed.

Out & About
Free glaucoma screening a great success

During the month of July Visique Optometrists in Whakatane ran a free glaucoma screening campaign.

Over 103 people were screened and out of those 12 were identified as at risk of having glaucoma. One of those 12 was immediately referred for a full assessment and was confirmed as having established glaucoma.

Early detection of glaucoma is vital so thanks Visique Whakatane for undertaking this important community initiative.
Volunteering for a Clinical Research Study

Have you ever been part of a clinical research study? If you were approached about participating in a study about glaucoma, would you consider it?

Medical research has improved the lives of countless people, and probably even our very own lives. Our understanding of glaucoma and its treatment are continually improving, but we would all agree that there is still much to discover if we are to further reduce the visual loss from glaucoma. Some types of research into glaucoma need volunteers with glaucoma, such as: genetic studies, studies of the tissues that form in the eye following glaucoma drainage surgery and clinical research studies of new tests, eye drops or surgery for glaucoma. These studies are totally dependent on volunteer individuals being willing to take part.

What do people get out of being a participant in a research study?

Some people appreciate the chance to learn more about their own health and the disease being studied. Sometimes people can gain access to new treatments before they become widely available, or sometimes it is just the knowledge that they are helping improve the health of future generations. Sometimes there may be compensation payments made to participants for expenses such as parking and/or transport costs and occasionally for time.

Are there any risks to people being a participant in a research study?

There are some risks involved in any clinical research, as there is with everything we do in life, including our routine medical care. However, any risks from being involved in a research study are usually minor and will have been identified beforehand. These will be described in the information sheet all participants will get to read before they agree to being involved in the research. In order to protect the safety and privacy of study participants, all health research studies involving people in New Zealand are subject to legal considerations and are carefully considered by ethics committees and the institutions in which the researchers work before the studies can commence.

What would I have to do for the research study?

This will entirely depend on the particular research study and will be detailed in the information sheet for that study. For example, it could be just one phone call to answer a few questions about how your eye felt after a treatment at the eye clinic the previous day, or participants may be seen weekly for 6 months to test a new formulation of eye drops, or participants may be asked to donate some blood or other tissue for analysis.

Can I change my mind about being involved in a research study?

Yes, you can change your mind at any time before the study starts or during the course of the study. There is never any obligation to be involved, or continue to be involved, in any research study. You do not have to give any reasons for not participating and your future health care will not be affected by your decision not to participate in any study.

If you are approached about participating in a research study, we do hope you will consider it. And finally, a word of thanks to all those who have considered taking part or have taken part in research studies – your involvement is very much appreciated by the researchers. Thank you!!

For New Readers

To those of you who have joined Glaucoma NZ since the last issue of Eyelights, we welcome you!

For your information here are some basic facts about glaucoma:

People of all ages can get glaucoma.

There are different types of glaucoma, but they all involve damage to the optic nerve, the nerve of sight, which is at the back of the eye.

Glaucoma is not curable. If you have glaucoma it must be monitored for the rest of your life.

A family history of glaucoma means you are at much greater risk of developing glaucoma.

Current treatments for glaucoma aim to lower eye pressure. Medication in eye drops can have side effects on other parts of your body. Tell your eye specialist if you notice any change in your general well-being since you started the eye drops.

If you have glaucoma tell your relatives, especially those close relatives like sisters, brothers and adult children. They have an increased risk of developing glaucoma so advise them to have an eye examination.

Glaucoma NZ is a registered charitable trust which receives no government funding. We rely solely on donations, sponsorship, grants and fundraising. All the information available to you from Glaucoma NZ is free.

Readers Story Contributions

If you would like to share your glaucoma story with readers, we would love to hear from you. Please email, post or fax your story to Glaucoma NZ, attention Eyelights Editor.

Suggested ways you could help Glaucoma NZ help you:

- Continuing your most welcome and appreciated donations.
- Arrange a community fundraising event in your area.
- Contact us to arrange for a glaucoma educator to speak at your club/organisation or workplace.
- Purchase an Entertainment Book.
- Suggest to your work colleagues that they hold a special day or event to support our charity.
- Think of us when preparing or updating your Will.
- Tell everyone about Glaucoma NZ and its services.

P.S. If you are looking at holding a fundraiser, please don’t hesitate to contact us to discuss ideas and promotional material we have to enhance your event.
Christmas Research Appeal
Finding a Cure

PLEASE support us in our efforts to fund research into new and improved treatments for the 68,000 New Zealanders living with glaucoma.

Ongoing research and development play a vital role in the treatment of glaucoma and ultimately finding a cure. Our goal is to raise $50,000 each year to specifically dedicate to worthwhile New Zealand based research projects.

Please help us invest in a future without blindness from glaucoma.

THANK YOU – every donation counts!

YES! I would like to make a donation to support research.

☐ $200  ☐ $100  ☐ $50  ☐ $20  ☐ $______ (other)

Name _______________________________________

Address ______________________________________

____________________________________ Postcode______

Phone No ___________________ Email ___________________

☐ I enclose my cheque made payable to Glaucoma NZ

☐ Please debit my credit card  ☐ Visa  ☐ Mastercard

Name on Card ________________________________

Card No _______/__________/__________/________

Expiry Date ____ / _____ Signature _______________

Donations of $5.00 or more are tax deductible and will be receipted.

YES! I would like to receive more information about:

☐ Donating on a regular basis by Automatic Payment

☐ Leaving a bequest in my Will to Glaucoma NZ

☐ I have already included Glaucoma NZ in my Will