

Summer 2021 / No.79

Glaucoma News

Our vision is for Australians to be free of glaucoma blindness



# Glaucoma Australia launches 'Treat Your Eyes' campaign for WGW2021

Glaucoma Australia has created a new, upbeat campaign called 'Treat Your Eyes', which is encouraging Australians to treat their precious peepers to an eye test in support of World Glaucoma Week (7 - 13 March 2021).

Iconic Aussie rock star and glaucoma patient Kirk Pengilly is once again fronting the campaign, aimed at generating greater awareness of the disease and mobilising Australians at risk to get their eyes tested to avoid irreversible damage or blindness.

Glaucoma is the leading cause of irreversible blindness worldwide. The disease affects 300,000 Australians, with 50% unaware that they have the disease because they haven't had a comprehensive eye exam. Known as the 'silent thief of sight' glaucoma develops slowly for most people, and a considerable amount of peripheral vision may be lost before the problem becomes apparent. There is no cure for glaucoma and vision loss is irreversible, making early detection and treatment key to saving sight.

CEO of Glaucoma Australia Annie Gibbins says, "Three in one hundred Australians will develop glaucoma in their lifetime, yet more than a third (35%) have not undergone regular eye examinations<sup>1</sup>, thereby increasing their risk of glaucoma remaining undiagnosed. We need this to change. We hope the Treat Your Eyes campaign can spark Australians into action and get an eye test.

"This year Australians can book an appointment through the Treat Your Eyes website page, www.treatyoureyes.org.au enabling us to track the response to the campaign and set a number we can aim to beat next year," adds Ms Gibbins.

1800 500 880 glaucoma.org.au glaucoma@glaucoma.org.au PO Box 420 Crows Nest NSW 1585

# From the CEO



Welcome to 2021 dear friends and supporters,

As we embark on a new year, I am hopeful it will bring with it a renewed

passion for eye health. As a result of COVID-19, many of you missed important eye health appointments, so there is a strong need to re-establish routines that give you confidence in your eye health.

To coincide with World Glaucoma Week in March, we will be launching a vibrant new campaign called 'Treat Your Eyes'. Our intent is to prompt people over 50 years of age to think about their eye health and consider the value they place on their sight. By inviting them to treat themselves to a biannual eye exam, we hope to find some of the 50% of people with glaucoma who are currently unaware they have it, as early detection and treatment can save sight.

Over the past year, our strategy to detect glaucoma early and defeat glaucoma blindness has strengthened our efforts toward improving appointment and treatment adherence. As a result, we are now ready to start measuring our impact. Feedback received from the recent community member survey will help Glaucoma Australia measure our impact and quality improve our broad range of activities. Sincere thanks to those who participated.

We are extremely grateful to everyone who donated to our recent Quinlivan Research Appeal and I look forward to sharing more updates on glaucoma research with you throughout the year.

Wishing you all the very best.

**Annie Gibbins CEO** 

### **Cover Story**

# Glaucoma Australia launches 'Treat Your Eyes' campaign for WGW2021

Australians over 50 years of age are more at risk and should have their eyes checked by an optometrist every two years to prevent the irreversible damage that can be caused by glaucoma. Kirk Pengilly had no family history of glaucoma – his story is proof that anyone can be blindsided by this insidious disease.

"When I got glaucoma it really hit home how lucky I was to not lose my sight," says Kirk, who was touring with INXS in the late 1980s when he experienced what felt like daggers being pressed into his eyes. It was only thanks to pioneering laser surgery at the time that his sight was saved from what was an acute angle-closure glaucoma attack.

"An eye test is quick and painless and could be the difference between losing your vision, or not. Just as you go to the dentist or doctor for a check-up, you need to put an eye exam on your things-to-do list – particularly those over 50 like me. Use this World Glaucoma Week as a cue to book and treat your eyes to a simple test."



Glaucoma Australia ambassador and INXS' Kirk Pengilly

A retail out-of-home advertising campaign featuring Kirk Pengilly in the 'Treat Your Eyes' campaign, worth more than \$1 million, has been developed by Shopper Media Group and will appear across its digital advertising panels in local shopping centres nationally. This will be supported by television and radio community service announcements that will air throughout the month of March.

1. The 2020 Vision Index, Optometry Australia

### Feature

# Gene therapy research regenerates optic nerve, bringing hope for future glaucoma treatment

Written by Centre for Eye Research Australia

Researchers have used gene therapy to regenerate damaged optic nerve fibres in a discovery that could help treat glaucoma, one of the world's leading causes of blindness.



Professor Keith Martin of CERA & University of Melbourne

The pre-clinical study, led by Professor Keith Martin from the Centre for Eye Research Australia (CERA) and University of Melbourne and Dr Richard Eva and Professor James Fawcett from the John van Geest Centre for Brain Repair at the University of Cambridge, is published in Nature Communications.

Professor Martin says the findings bring hope of future treatments which could repair nerve damage which causes blindness in glaucoma and potentially even restore sight.

Around 300,000 Australians have glaucoma, a disease caused by progressive damage to the optic nerve, which transfer visual information from the eye to the brain.

Conventional treatments focus on reducing eye pressure to prevent optic nerve damage, but they do not work for about 15 per cent of patients and there is currently no way to repair damaged nerve cells.

"In the past it seemed impossible we would be able to regenerate the optic nerve but this research shows the potential of gene therapy to do this."

#### About the research

- The team tested whether a gene responsible for producing a protein known as Protrudin could stimulate the regeneration of nerve cells and stop them from dying when they were injured.
- They used a cell culture system to grow brain cells in the lab and then injured them using a laser before introducing a gene to increase the amount of Protrudin in the cells, vastly increasing their ability to repair and regenerate.
- Tests of eye and optic nerve cells found the protein enabled significant regeneration weeks after a crush injury to the optic nerve.
- The research demonstrated almost complete protection of nerve cells from a mouse retina growing in cell culture, a technique which would usually be expected to result in extensive cell death.

#### **New potential**

- Professor Martin says the results are promising. "What we've seen is the strongest regeneration of any technique we've used before," he says. "In the past it seemed impossible we would be able to regenerate the optic nerve but this research shows the potential of gene therapy to do this."
- The international team is continuing its collaboration in Melbourne and Cambridge. Professor Martin says next steps are to explore the ability of Protrudin to protect and regenerate human retinal cells.
- The research was supported in the UK by The Medical Research Council, Fight for Sight, The Bill and Melinda Gates Foundation, Cambridge Eye Trust and the National Eye Research Council.

Read the full study at Petrova, V et al. Protrudin functions from the endoplasmic reticulum to support axon regeneration in the adult CNS. Nat Comms; 5 Nov 2020; DOI: 10.1038/s41467-020-19436-y



### Research

# Aussie-developed glaucoma implant performs well in initial trial

#### Written by Myles Hume

A Victorian biopharmaceutical company has reported positive results from a Phase 1 study examining the safety of its biodegradable implant for glaucoma.

PolyActiva announced on 5 November that its lead candidate, the Latanoprost FA SR Ocular Implant, was well tolerated in all eight patients with no significant safety findings.

The study also showed the implant persists for the six-month treatment period after which it biodegrades completely over six weeks. This biodegradation profile should enable repeat dosing with the implant, the clinical-stage company stated.

"Our goal is to improve the reduction of intraocular pressure by ensuring a constant daily dose of drug for the entire treatment period and offering the opportunity for repeated use."

The implant is designed to provide a constant daily therapeutic dose of Latanoprost free acid - the active ingredient of commonly prescribed glaucoma eye drop Xalatan – for six months. It is administered in a simple procedure at an ophthalmologist's office using PolyActiva's bespoke administration device.

According to the company, up to 46% of patients do not remember to use their eye drops or administer them poorly.

"Our implant represents a significant advance for the treatment of glaucoma. Our goal is to improve the reduction of intraocular pressure (IOP) by ensuring a constant daily dose of drug for the entire treatment period and offering the opportunity for repeated use." Dr Russell Tait, CEO of PolyActiva, said.

"Furthermore, the implant should reduce the frequency of conjunctival hyperemia and corneal surface disease side effects often seen with drop therapy."



The implant is designed to provide a constant daily therapeutic dose of latanoprost free acid over six months.

PolyActiva has now started a Phase 2 dose ranging study at nine clinical trial sites in Australia. The study will aim to identify the minimum effective dose of latanoprost free acid and confirm the safety of the implant.

PolyActiva is based in Melbourne, havina received venture capital funding from Brandon Capital's Medical Research Commercialisation Fund (MRCF) and Yuuwa Capital.

It is also developing a levofloxacin ocular implant for prevention of endophthalmitis following ocular surgery, and in January received a Medical Research Future Fund grant for a sustained release ocular implant that delivers steroids and non-steroidal anti-inflammatory medications for macular oedema.

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### News

# Is cannabis a treatment for glaucoma?

#### Written by Dr Nick Andrew

Medicinal cannabis is often presented as an alternative treatment for glaucoma. Although eleven healthy subjects underwent there is evidence that cannabis lowers comprehensive ophthalmic exams before and intraocular pressure, its role as a viable glaucoma after smoking 2 grams of cannabis. therapy is limited by a short duration of action, psychotropic effects, and possible tachyphylaxis. In this article I attempt to clear the haze surrounding the topic of cannabis and glaucoma.



Dr Nick Andrew

Cannabis is a genus of plant best known for producing a family of compounds known as 'cannabinoids'. Over 60 different cannabinoids occur naturally, but only a handful have been researched in detail.  $\Delta$ -9 tetrahydrocannabinol ('THC') is the main psychoactive agent.

Other commonly known cannabinoids include cannabidiol (CBD) and cannabinol (CBN). The cannabinoid profile varies according to the species of cannabis plant, the way it is grown, and which part of the plant is harvested.

The two main species of cannabis are C. Sativa, which is rich in THC, and C. Indica, which is rich in CBN. Cannabinoids are also naturally produced by our body ('endocannabinoids'). Cannabinoids bind to cannabinoid receptors (CB1 and CB2) to modulate neurotransmitter release throughout the nervous system.

In 1971 it was discovered that smoking cannabis can lower intraocular pressure. To investigate the effect of cannabis on the human visual system.

Unexpectedly, the subjects were found to have a change in intraocular pressure ranging from +4% to -45%. Subsequent studies have demonstrated that approximately 65% of glaucomatous eyes will experience a 30% pressure reduction after cannabis inhalation. The pressure-lowering effect lasts three to four hours and is dosedependent.

THC is the main cannabinoid that lowers intraocular pressure. It is thought to bind to CB1 receptors on the eye to reduce aqueous production and increase aqueous outflow.

The pressure-lowering effect of THC is not mediated through the central nervous system but is a local eye effect. This makes eyedrops a plausible route of administration. THC is also claimed to have a neuroprotectant effect on the optic nerve. However, evidence for this role appears weak.

It has been shown that CBD partially blocks the pressure-lowering effect of THC. This is important, as cannabis plants contain a mixture of cannabinoids including both THC and CBD.

There are several problems with using cannabis to treat glaucoma. Firstly, the pressure-lowering effect is brief (three to four hours), which necessitates frequent dosing. This is impractical for a chronic disease that requires continuous, lifelong control.

It is estimated that 24hr IOP control would require eight to 10 marijuana cigarettes. This dose would have significant psychoactive and cardio-pulmonary side effects and would also be more expensive than conventional glaucoma treatments.



### **Volunteer News**

#### Continued from page 5

Tachyphylaxis is another limiting factor. One study treated nine end-stage glaucoma patients with inhaled THC capsules every four hours. All had a reduction in IOP but seven of nine patients lost the beneficial effect due to tolerance. All patients elected to discontinue treatment by one to nine months due to loss of benefit or systemic side effects.

Systemic side effects of cannabis could be reduced by manufacturing synthetic cannabinoids without psychoactive properties or administering the cannabinoids as an eye drop.

Both possibilities are being pursued. A synthetic analogue of THC known as HU211 has minimal psychoactive effects but still achieves IOPlowering. Intraocular penetration of cannabinoid eyedrops has been unsuccessful so far due to their hydrophobic nature, however this could be overcome by using a microemulsion or cyclodextrin to help penetrate the tear film.



The cannabinoid profile varies according to the species of cannabis plant, the way it is grown, and which part of the plant is harvested

The cannabinoids hold promise as a new glaucoma pharmacotherapy. Since they act via a different family of receptors, they could work synergistically with existing glaucoma treatments. However, inhaling or ingesting cannabis as a glaucoma treatment makes little sense due to systemic side effects, short duration of action, and likelihood of tachyphylaxis.

Future studies need to focus on individual chemicals rather than non-standardised plant material. In my opinion, if cannabinoids have a role in glaucoma care it will be a synthetic analogue of THC delivered topically to the eye.

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# **Volunteer Profile**

Glaucoma Australia received a Governor-General medallion from Their Excellencies, Mr and Mrs Hurley, for presentation to a member of our community who has contributed in a significant way to our efforts. CEO Annie Gibbins was delighted to present to one of our extremely dedicated volunteers, Brian.



GA CEO Annie Gibbins and medal recipient Brian

Brian has volunteered his time and expertise to Glaucoma Australia on a weekly basis for the past 12 years!

Being a retired banker, Brian is definitely the best person to talk to if any financial calculations are required. He quietly ensures donations and merchandise payments are efficiently processed, undertaking accounts receivable/payable tasks with great diligence. Brian's expertise has been invaluable, and he is a worthy recipient of the Governor-General medallion.

Thank you Brian, we appreciate the outstanding support that you, your wife Barbara, and son Warwick give to those living with glaucoma.

If you are interested in volunteering for Glaucoma Australia, visit: www.glaucoma. org.au/how-you-can-help/volunteer OR Call us on 1800 500 880

### Update

# Glaucoma Shared Care Model Improves Outcomes

#### Written by mivision

A unique shared care model, between ophthalmologists at Prince of Wales Hospital and optometrists at Centre for Eye Health, is proving to be an effective option for managing ongoing care of patients with chronic stable glaucoma who are at low risk of vision loss.

A paper,<sup>1</sup> published in the International Journal of Integrated Care reports that combining the expertise and resources of optometry and ophthalmology increases outpatient capacity and improves the timeliness of follow up for suitable individuals.

In the long term, by "unclogging the system" and reducing patient wait times, the authors state that "safer, more effective, and more just and equitable access to care" can be achieved.

The retrospective, longitudinal study stratified 266 patients diagnosed or suspected of glaucoma to either ongoing ophthalmology-led (n = 81) or optometry-led shared care (n = 185). The researchers found that under half (565/1224, 46%) of all follow up consultations over the total study period of 45 months were seen in optometry-led care, with a re-referral rate to ophthalmology of 21%. Treated patients showed a median intraocular pressure (IOP) reduction of 20% and a median time delay of just two days between the actual and recommended review period.

The potential to offer shared care is particularly important now, given that the public health system is struggling to meet demand for services, according to Michael Yapp, Head of Clinical Operations and Teaching at Centre for Eye Health, who said the situation has been further exacerbated by the current COVID-19 environment.

He said, "Transferring patients into a shared care setting assists with ensuring scarce public resources are freed up for more complicated and acute patient care." Informal feedback from patients under the shared care model suggests they appreciated the reduced waiting times, both in terms of securing an appointment time and time spent at the appointment.

Although the researchers did not assess any cost savings associated with this shared care model, Mr Yapp said a recently published paper looking at a similar model (Community-Eye-Care) out of Westmead hospital cites costs being 22% less within the shared care system.<sup>2</sup>

"Shared care programs around Australia are still very much in the early days of development. There is a growing body of evidence that they are effective and efficient. This particular paper looks at ongoing results over time and so shows that the model is an effective option for ongoing as well as initial care. Most importantly, it gives us the numbers to confirm the growing burden of care related to chronic disease management," said Mr Yapp.

"The 266 patients enrolled in the study typically required five follow up visits over just three years, amounting to 1,224 follow up appointments. It is easy to see how the public system could be easily overwhelmed by this ongoing care demand. As a result, it is hoped that it will lead to consideration of a wider uptake of similar models around the country where appropriate."

1. Ly A, Wong E, Huang J, Yapp M, Masselos K, Hennessy M, et al.. Glaucoma Community Care: Does Ongoing Shared Care Work? International Journal of Integrated Care. 2020;20(3):5. DOI: doi.org/10.5334/ijic.5470

2. Ford, B. K., Angell, B., Liew, G., White, A., & Keay, L. J. Improving Patient Access and Reducing Costs for Glaucoma with Integrated Hospital and Community Care: A Case Study from Australia. International journal of integrated care. 2019;9(4), 5. DOI: doi.org/10.5334/iji

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# Glaucoma Hands-on Experience for Orthoptic Students

Glaucoma Australia has enabled COVID safe 'virtual' clinical placements for final year Master of Orthoptics students from The University of Technology, Sydney (UTS).

During the placement, future eye care professionals provide patient education and support via phone calls, emails and social media, and create educational social media posts and educational videos. During patient interactions, students are exposed to the high levels of patient anxiety and mental health challenges experienced by some in the community. Above all, they gain in-depth knowledge of glaucoma and the role patient support organisations play in healthcare.



UTS Orthoptic student Dima Abdulahad

Sapna Nand, Senior Orthoptist Patient Educator for Glaucoma Australia said "Orthoptists are generally the first clinician a patient comes in contact with during their eye appointment. Spending a few minutes to check on their general wellbeing, educating the patient on their eye condition or, if short on time, simply referring them to Glaucoma Australia is highly beneficial."

She continued, "Orthoptists are highly trained professionals with the clinical background to educate their patients and help them gain the knowledge and confidence they need to be in control of their diagnosis and maintain their quality of life". After clinical placement, Hayley Beale from UTS remained on the Glaucoma Australia team as a volunteer educator. "Reflecting upon this exposure, I have a more in depth understanding of what these patients might be going through. I now have greater awareness around what questions to specifically ask patients following their optometrist appointment or initial specialist appointment. I have become aware that many patients are less intimidated by the orthoptist than their doctor, so I encourage them to feel comfortable to ask myself, the orthoptist, any questions which come to mind."

"The practical experience gained with Glaucoma Australia provides orthoptist students with an insight into what the patient experiences before and after an appointment"

- Sapna Nand, Patient Educator

Dima Abdulahad, who will graduate in 2021 said, "Calling my first patient was a little bit stressful as I have not done a similar job throughout my master's degree. However, later in the conversation, I felt comfortable and able to interact effectively with the patient and provide accurate information. Additionally, this unique opportunity allowed me to speak with various people who were thankful for the call to discuss their questions. As a future orthoptist, my job will not only focus on testing vision and pressure; it will be based on communicating with patients, being empathetic, and kind. Therefore, my day at Glaucoma Australia was invaluable and it was exciting to practice new experiences that I have not had in my other placements."

First year Master of Orthoptics students from UTS will start placements with Glaucoma Australia during the 2020 final semester and continue into 2021.

## My Glaucoma Story

# Valda's story

My ophthalmologist had a 'watch' on my eyes from when I was aged in my 50's. The reason being, my mother had glaucoma, she was diagnosed when she was around 70 (1972).

By 2020, when I was aged 71, my ophthalmologist detected signs of glaucoma in my right eye, with pressure at first being 25 mmHg.

My sight is good, I am very grateful that my doctor and I kept watch on my eyes when I was aged in my 50's, so changes in my eyes were detected as early as possible.

Early in 2003 I had extensive tests to determine whether I definitely had glaucoma, the result was in the right eye only, however, I was placed on two types of drops to use in both eyes.

My pressures have both improved and fluctuated through the years, but now they remain at approximately 11/13 mmHg.

'My sight is good, I am very grateful that my doctor and I kept watch on my eyes when I was aged in my 50's, so changes in my eyes were detected as early as possible.'

Just over a year ago, my doctor told me that my left eye is untouched by glaucoma, and my right eye has slight damage in the peripheral area. This supports what I often think about; that even though I truly have glaucoma in one eye, I'm glad both have been treated.

## My Glaucoma Story

# **Elaine's Story**

Because my mum wore glasses, she had my eyes tested when I was in primary school. I needed glasses then for short-sightedness and astigmatism. I only ever used my glasses occasionally.

Towards the end of her life – she died at 90 years old - my mother had glaucoma. We were told to get checked, my sister, my brother and myself, because there was a higher risk of us getting glaucoma.

When I went to get a new prescription for glasses, the optometrist detected the glaucoma and referred me to an eye clinic and the doctor I saw tried laser first. Now I have been putting one drop into both eyes each night, and that has kept my pressure okay. I am so glad that my glaucoma was detected early!!



If you wish to share your glaucoma journey go to: www.glaucoma.org.au/share-yourstory OR email your story and a photo (optional) to glaucoma@glaucoma.org.au



### **Upcoming Events**

# Perth Glaucoma **Support Group**



Guest speaker: Professor Bill Morgan Date: Saturday 10th of April, 2021 **Time:** 2:00pm – 4:00pm Location: Harry Perkins Building: QQ Block,

QEII Campus, Nedlands (Behind southern side of Lions Eye Institute).

Paid parking near Perkins Building, or free parking Cnr Smyth Road and Verdun Street (on Bowling/hockey club verge).

RSVP: If you would like to confirm your attendance and pay in advance you can now book online at www.glaucoma.org.au/events/ perth-support-group OR you can call/text Gaela on 0416 074 415 or email gaela12@ hotmail.com and pay on the day.

Please note: Extra precautions and hygiene standards will be put in place, including social distancing.

Visit www.glaucoma.org.au/events for upcoming events throughout the year.

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## In Memoriam

We acknowledge with gratitude gifts, from family and friends, in loving memory of:

Mrs Jennifer Dawn Best

Mrs Rus Gaske

## **Bequests**

The Estate of the Late Lily Irene

The Estate of the Late Dr David Douglas

The Estate of the Late Mr Leslie Trevor Myers

# **Giving HOPE**

A gift in your will can help eliminate glaucoma blindness.

If you would like more information about leaving a gift in your will please contact Glaucoma Australia on 02 9411 7722 or email ceo@glaucoma.org.au



# How can we help?

**Glaucoma Australia offers FREE** education and support to people living with glaucoma.

If you or someone you care for has been diagnosed with glaucoma we recommend you join our community to access free resources, guidance and support.

### Join our community online

www.glaucoma.org.au/get-support

Call our free support line 1800 500 880

### **Contact details**

PO Box 420 Crows Nest NSW 1585 Suite 3.02 44 Hampden Road Artarmon 2064 T: 02 9411 7722 T: 1800 500 880 (Freecall) F: 02 9413 4466 E: glaucoma@glaucoma.org.au W: www.glaucoma.org.au

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### Your Questions Answered



# **Q** Who is a glaucoma suspect?

A Clinicians will refer to someone as a 'glaucoma suspect' if they think the person might be showing early signs of glaucoma but they are not yet sure. Many people suspected of having glaucoma at this stage turn out not to have it at all, but some do develop it in time and it is these people who can benefit the most from timely treatment.

After their first appointment, glaucoma suspects can sometimes remain as "ongoing glaucoma suspects" as they need to be monitored by their optometrist or ophthalmologist overtime for signs of glaucoma.

#### Q What are the symptoms and risk factors of being a glaucoma suspect?

A Glaucoma suspects have no symptoms to suggest eye disease. They may however, have one or more risk factors of developing glaucoma overtime.

Common risk factors include; High pressure within the eyeball but with no optic nerve damage yet (this is also referred to as ocular hypertension), 'suspicious' optic disc appearance which suggests glaucomatous damage, older age and a family history of glaucoma.

Q Does an ongoing glaucoma suspect get treatment to lower their eye pressure?

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## with Sapna Nand

Sapna is an orthoptist educator with over 10 years' experience working with glaucoma patients. If you have any questions for Sapna, you can call our free toll support line 1800 500 880.

A Usually a person thought to be a glaucoma suspect will not be treated for the condition until the diagnosis is confirmed. An ophthalmologist or optometrist will monitor closely before starting treatment, which can often mean they will wait for any signs of optic nerve damage.

Glaucoma typically advances slowly, so its progress can be tracked safely without treatment until the diagnosis is confirmed. However, there are instances where treatment will be applied as a preventative measure, in the event that additional risk factors have been identified.

#### Why is it important for an ongoing glaucoma suspect to attend their follow up appointments, and how often are their appointments?

A Glaucoma is a progressive lifelong disease, and changes to the optic nerve and peripheral vision can occur at any time without any obvious signs or symptoms.

Once a person has been determined as an ongoing glaucoma suspect, their optometrist or ophthalmologist will suggest a follow up date. This can vary between 3 monthly to 12 monthly checks depending on the overall health of their eyes and also the risk factors the person has of developing glaucoma. Along with eye pressure checks, a scan of the optic nerve and peripheral visual field tests will be done at the follow up appointments. The results of these tests will be compared with the previous ones to assess for any changes such as progression of optic nerve damage or a further increase in eye pressure.

Adherence to the follow up appointments are crucial in monitoring these changes.

#### What determines a confirmed glaucoma diagnosis for someone who has been an ongoing suspect?

A Glaucoma is diagnosed once there are signs of optic nerve damage which can lead to loss of peripheral vision. These changes can be detected by an examination of the optic nerve by your ophthalmologist or optometrist and also by the scans of the optic nerve.

Appropriate treatment will then be started to lower your eye pressure which is usually in the form of eye drops.

It is very important that someone suspected of experiencing the early onset of glaucoma has regular checks to make sure there is no continuing damage to the optic nerve. Even though a person is not yet receiving any treatment for the condition, she or he may still risk losing their vision if in fact they do turn out to have glaucoma.