



# Eyelights

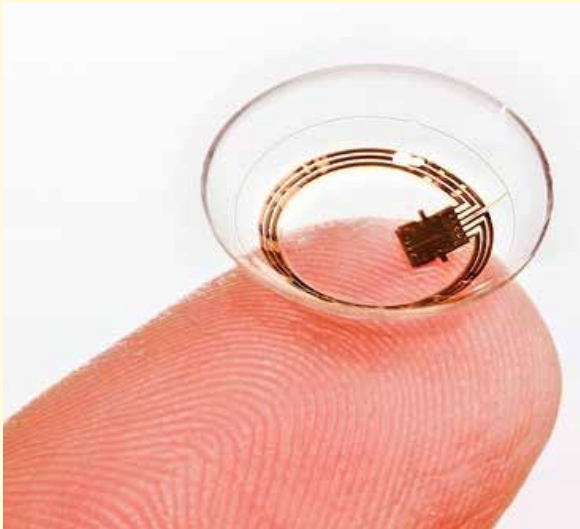
The Newsletter of Glaucoma NZ • Volume 12 | Issue 2 | July 2015

**Inside: What causes Eye allergies? • July Annual Awareness Appeal**

## Contact lenses for the future

Have you ever struggled with contact lenses? Maybe you have worn them for years without any problems. Certainly a lot of people do, mainly because they don't want to wear glasses. Then in later life they discard them in favour of glasses because they find them more convenient. Some people opt for Laser surgery, usually for the same reasons. A few people don't have any choice, they might be prescribed bandage contact lenses because they have a damaged cornea or they might have to wear a lens in one eye because the difference between the two eyes is too great for them to be fitted successfully with glasses. Maybe you have never worn them, or even considered it.

If you have glaucoma, all that may be about to change. A contact lens has been developed that can not only measure your intraocular pressure, but also send regular readings back to a receiver that you wear. This will enable your ophthalmologist or optometrist to monitor your pressure over prolonged periods of time. For some of the more intractable forms of glaucoma this could represent a revolution in the management. It has long been suspected that considerable damage is done by what are called pressure spikes. Of course pressure spikes by their very nature are ephemeral and difficult to measure.



They often occur at night; occasionally people are admitted to hospital to have their pressure measured on a 24hr basis. Wearing contact lenses that can provide this monitoring facility should improve considerably the management of some of the most difficult cases. They aren't new; a contact lens for continuous monitoring of intraocular pressure was produced in Perth, Australia, over 20 years ago. But this lens with the curious name of Triggerfish, produced by a Swiss Biotech company called Sensimed, seems to have stood up to all the testing and is now on the market. It works by sensing minute changes in corneal curvature produced by the fluctuating intraocular pressure. Then it sends the information back wirelessly to a receiver worn around the neck.

There is also now an intraocular lens that can provide a reading of the intraocular pressure taken from within the eye, although they are not on the market yet and Google are developing a contact lens that monitors blood glucose.

So those of you who have worn contact lenses in the past may be asked to wear them again. Some of you who have never even considered it might be asked to do so for the first time.

However if you have, or if you know someone else who wears them, you will also be aware of how easily they can be lost. That is not a good idea with these lenses as they are very very expensive.

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## 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

## What causes eye allergies?

Also called allergic conjunctivitis or ocular allergy, eye allergy occurs when something you are allergic to irritates the conjunctiva. The conjunctiva is the delicate membrane covering the eye and the inside of the eyelid that is normally translucent and lies on top of the white of the eye (the sclera). Allergic conjunctivitis starts when the immune system identifies an otherwise harmless substance as an allergen. This causes your immune system to overreact and release chemicals which cause an allergic reaction. In this case, allergic reactions include eyes that water, itch, hurt or become red or swollen.



The most common causes of allergic conjunctivitis are seasonal allergens such as pollen and mold spores. People with seasonal allergic rhinitis (hay fever) normally notice their symptoms worsen when they go outdoors on days with high pollen counts.

Indoor allergens such as dust mites and pet dander can also cause eye allergies year-round.

Eye allergy symptoms can be very annoying however they do not threaten the eyesight. Allergic conjunctivitis is also not contagious.

If indoor allergens are causing your eye allergy symptoms, avoidance is the key to relief. Use a vacuum with a HEPA (very fine) filter to reduce dust in your home or try keeping pets out of the bedroom to reduce exposure.

If pollen and other seasonal allergens are causing your misery, here are a few helpful suggestions:

- Wear a hat with a wide brim to reduce the amount of allergens that blow into the eyes.
- Sunglasses can also help.
- Apply saline eye drops to the eyes after being outdoors to wash away allergens from the ocular lining.
- Eye rubbing can aggravate seasonal allergy as rubbing the eye releases more chemicals that further stimulate the immune response.

Over-the-counter antihistamine pills and eye drops are often used for short-term treatment of eye allergy symptoms. However, prolonged use of some eye drops may actually make your symptoms worse. Medications that stabilize the cells responsible for histamine release are also available.

Corticosteroid eye drops are effective, but they often have side effects, even when used only for a short time. Use of this medication should be managed by an ophthalmologist due to the risk of side effects, such as glaucoma (increased ocular pressure), cataracts and infection.

Eye drops used for the treatment of glaucoma may cause an allergy resembling allergic conjunctivitis. All of the glaucoma drops may cause an allergy but the most common drop that can cause allergic conjunctivitis is Brimonidine (or Alphagan). This is also in the combined medication Combigan. If you are using any of these drops and you develop a sore, irritable eye then you need to contact your eye doctor immediately.

**Remember** – an eye checkup is the only way to make sure that there is not something more sinister causing your symptoms, such as an infection. Your local optometrist or ophthalmologist can also help guide your treatment and provide an effective management plan.



**Clinicians**   
Research Based

Clinicians are delighted to announce their support for Glaucoma NZ via their parent company Douglas Pharmaceuticals; who are silver sponsors to GNZ. As such **anyone who chooses to purchase any of the Clinicians range of Vitamins and Supplements will also be supporting GNZ.**

Clinicians is a New Zealand developed and owned range of natural health products, manufactured at a pharmaceutical grade manufacturing facility. The company was founded by two pharmacists in 1997 and has expanded rapidly, so the product range now covers all major health areas. Clinicians provide easy to take supplements containing nutrients and herbs at therapeutic doses; all formulations being supported by research based evidence. Clinicians products are available from all pharmacies and good health stores throughout the country.

With regards to eye health Clinicians has developed VisionCare with lutein and Visionfood. These stand alongside a full range of nutritional oils from both fish and krill sources.

  
douglas

## July is Glaucoma Awareness Month

### Help Glaucoma NZ to continue to save New Zealanders' sight before it's too late.

Imagine not being able to drive, work, play sport, see your family, watch television, read or enjoy any activities that involve your sight.

That's the future more New Zealanders will face if knowledge about glaucoma, the leading cause of preventable blindness, drops.....or stops.

"Raising funds for Glaucoma NZ to continue saving what most people consider their most precious sense, sight – is a major focus of this year's campaign. For 14 years, GNZ has fought to make glaucoma a highly visible disease so people are more aware of the importance of getting their eyesight checked regularly", says Helen Mawn, Executive Manager.

Glaucoma New Zealand offers services to everyone affected by and concerned with glaucoma; advocating for regular eye checks, educating the public and health professionals, providing support and information to those with a diagnosis of glaucoma and their families, as well as contributing to research.

About 91,000 New Zealanders over the age of 40 have glaucoma and more than half don't know they have it. Glaucoma is a silent disease; you can be legally blind before you notice the symptoms.

Worldwide 64 million people have glaucoma and that's expected to grow to 111.8 million worldwide by 2040.

Blindness can mean the instant loss of your driver's licence and a massive change to your lifestyle in general.

**Of concern to health professionals is that with early detection, blindness from glaucoma is preventable.** A glaucoma eye examination can pick up the disease very early and appropriate treatment like eye drops can halt its progression and preserve sight.

**The good news is that 98% of those who**

**comply with their prescribed treatment for glaucoma will not go blind.** That could mean putting in eye drops every day for the rest of their lives – a simple thing to do to save precious sight.

The support provided to increasing numbers of people diagnosed with glaucoma, from Kaitaia to Bluff, comes at an additional cost. Glaucoma New Zealand receives no government funding for its important work.

**Donations to help Glaucoma NZ continue with its sight saving work can be made via our website [www.glaucoma.org.nz](http://www.glaucoma.org.nz), completing the coupon on the back page of Eyelights, or by visiting your nearest ASB Bank branch.**

**Participating optometrists, ophthalmologists and pharmacies will also have Glaucoma NZ donation boxes.** In addition many optometrists and ophthalmologists are donating \$2.00 from each eye examination undertaken during July and 'add a dollar per purchase' at pharmacies. We are also grateful for the donations that we have received in lieu of taking donation boxes.

This year we welcome for the first time the support of a number of **businesses and organisations taking our donation boxes.**

**Thank you!**

### APPEAL SPONSORS, THANK YOU

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Watch out for the article in the NZ Woman's Weekly on our ambassador Sir Richard Hadlee and his wife Lady Dianne.

And our sincere appreciation to the GNZ members who have publicly shared their glaucoma stories as part of our Appeal month.

### Early detection of glaucoma is vital when it comes to preventing blindness.

That means having an eye examination for glaucoma every five years from the age of 45 and every three years from the age of 60. However, at any age, if you notice changes in your eyesight, then you should have your eyes examined at that time.

For example, don't rely on hobby glasses. It is a good idea to have your eyes checked by an eye health professional, just in case there is an underlying problem.

In addition if you have risk factors for glaucoma, such as family history, then you may need your eyes checked more frequently.

## Reader's Story

### Maria's lucky escape from blindness leads to support for much needed charity

Invercargill mother of two Dr Maria Crawford used to believe glaucoma was a scary eye disease occurring in the elderly and her lack of understanding nearly cost her sight.

While pregnant with her second child in 2012, Maria was at work when a headache started followed by blurry vision, a red eye and she found bright lights irritating. This wasn't unusual and these episodes usually settled.

"However this time, my vision in both eyes became impaired and later I started vomiting. As I had experienced so many prior similar episodes and had visited an optometrist before to rule out any visual difficulties, the seriousness of what was happening to me went unnoticed," she says.

The next day, Maria, a clinical psychologist, was still struggling and her midwife sent her to hospital.

"I saw several doctors and can vividly recall one returning, kneeling down beside the bed, and saying: 'Maria we do not know what this medication is going to do to your baby, but if you don't take this now, you are going to go blind'."

Maria was then transferred from Southland Hospital to Dunedin, where she spent four days receiving treatment, including laser procedures.

Six months later, Maria gave birth to a beautiful, healthy baby girl.

"She was perfect and I felt, and continue to feel, like the luckiest woman in the world. I am still monitored on a regular basis but my eyes are currently stable," Maria says.

She is standing up for Glaucoma NZ this July to support the great work it does raising awareness of the disease and asking for others to support the charity, too.

Maria urges people and businesses to give generously to Glaucoma NZ and to think about becoming a corporate sponsor. In this way her message to family and friends will go much wider.

"Please tell your friends and family about glaucoma and encourage them to get checks where required. The potential consequences of not doing so, are far too serious to ignore."



*"Invercargill clinical psychologist Dr Maria Crawford was diagnosed with glaucoma while pregnant with her daughter Ellie-Mae."*

*Photo by Lisa Rae Photography.*



## Eye on Research

### Could how you sleep affect your glaucoma?

In an interesting study, researchers at the State University of New York Downstate Medical Centre looked at the effect of sleeping position on eye pressure. The research, reported in the Journal of Glaucoma, compared fifteen people with self-reported glaucoma to fifteen without the disease.

Patients were assessed in a sleep laboratory in two different sessions. In one session, they slept flat on their backs with no pillow while in the second session they slept on a wedge shaped pillow that elevated their head 20 degrees above the horizontal.

Baseline eye pressure was measured prior to sleep, then at two-hour intervals during a sleep period lasting six hours.

The study subjects' eye pressure did not differ significantly between the two positions during the awake measurement for either group. But during the sleep period, the average eye pressure reading when subjects slept on the wedge pillow with their head raised was 1.56 mmHg\* lower in the glaucoma group and 1.47 mmHg lower in the normal group, compared with sleeping flat on the bed.

This corresponds to a 9.3 percent reduction of pressure in the glaucoma group and an 8.7 percent reduction in the non-glaucoma group, compared with measurements taken when subjects slept on their backs without any pillow.

A total of 25 of the 30 subjects (83.3 percent) had lower eye pressure when sleeping with their head elevated, and 11 subjects (36.7 percent) had reductions in the average eye pressure that exceeded 10 percent when

sleeping on the wedge pillow.

The study authors concluded that sleeping with the head elevated 20 degrees reduces night-time eye pressure measurements in glaucoma and non-glaucoma subjects alike, compared with sleeping with a flat back.

This interesting study offers an insight into how position and other factors may affect eye pressure, and could lead to promising new ways to help lower eye pressure. It just goes to show that we are learning more and more about this disease every day, and as our knowledge advances, so will our methods to help reduce the impact of this important cause of blindness.

## Make a lasting gift

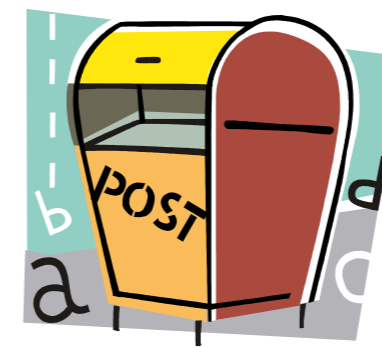
**Including a gift to Glaucoma New Zealand in your Will is a powerful way to make a positive difference to the outcomes of those with glaucoma and their families, far beyond your lifetime.**

Some initial steps to consider:

- Talk to your family. Help them understand why you want to support Glaucoma NZ into the future, as well as look after your own family and loved ones.
- Seek advice from your solicitor. People leave bequests of all sizes and no gift is too small to make a difference. Ask about adding a codicil rather than writing a new Will.
- Decide how you wish to share your estate. Whatever the size of your bequest, please be assured it will make a real difference to those with glaucoma, and the services Glaucoma NZ provide.

For more information and to download a Bequest Form that you can discuss with your solicitor, please visit [www.glaucoma.org.nz](http://www.glaucoma.org.nz).

Alternatively phone our office 0800 452 826, or email [info@glaucoma.org.nz](mailto:info@glaucoma.org.nz).



## Public Mail Box

### What is the difference between glaucoma and ocular hypertension?

Glaucoma refers specifically to high pressure causing damage to the optic nerve and/or peripheral vision. Ocular hypertension refers to high pressure which does not damage the nerve or vision. Most patients with ocular hypertension do not develop glaucoma.

### Can you tell me anything about marijuana being used to treat glaucoma?

There have been a number of studies of marijuana in glaucoma and most have shown that it can lower eye pressure. That sounds promising doesn't it? However marijuana has never been a viable treatment because its effective life in the eye is so very short. A patient would have to smoke almost constantly to have any useful benefit; otherwise the pressure will be going up and down all the time which is potentially harmful. One might wish to argue the pros and cons of constant marijuana use and how that might affect a person's general health and other day to day activities. The reality is that, despite some validity, marijuana is not a practical treatment for glaucoma.

A few years ago one of the pharmaceutical companies managed to isolate the particular cannabinoids in marijuana that affect the pressure and they developed a cannabinoid eye drop. However because of its chemical composition the drop wasn't absorbed into the eye so it proved ineffective and was abandoned.

## Entertainment™ Books

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Order your Entertainment Book now and not only will you receive over \$15,000 in valuable offers, valid to 1<sup>st</sup> June 2016, but you will also help raise vital funds for the ongoing work of Glaucoma NZ.

To purchase your Entertainment Book, including Digital Membership which allows you to redeem offers directly from your iPhone or Android smartphone visit [www.glaucoma.org.nz](http://www.glaucoma.org.nz), or phone 0800 452 826.

## Contributions to Eyelights

We would like to thank the following people for contributing articles to our 2015 Eyelights publication.

### April edition

Dr Jennifer Craig  
Dr Justin Mora

### July edition

Assoc. Prof. Gordon Sanderson  
Dr Siddharth Ogra

## July Annual Awareness Appeal

**WE NEED YOUR HELP** to continue our vital work of saving sight. Please support our efforts to eliminate unnecessary blindness from glaucoma.


Without additional funding the full delivery of our programmes and initiatives will be in jeopardy.

An estimated 91,000 New Zealanders over the age of 40 currently have glaucoma. 50% of these people don't know they have it.

For 14 years we have reached thousands of New Zealanders with our nationwide programmes but there is still much more to be done.

Public Meetings	Workplace/Community Seminars
Educational Resources	0800 Advisory Service
Eyelight Publication	Health Professionals Education Programme
Research	Advocacy

**Your support is important to us – we can't do it alone.**

 **THANK YOU** for your continued generosity - every donation counts!

**YES!** I would like to make a donation to the July Annual Awareness Appeal

\$300     \$100     \$50     \$20  
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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  
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## The Trustees of Glaucoma NZ

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Glaucoma New Zealand - CC21421 is a registered charitable entity in terms of the Charities Act 2005.

Accountants - Moore Stephens Markhams

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