

Glaucoma News

Autumn 2019 / No.72

Our mission is to eliminate glaucoma blindness

Don't be blindsided by glaucoma

In the lead up to World Glaucoma Week (10–16 March) Glaucoma Australia launched a new risk awareness campaign targeting people who are at greater risk of developing glaucoma to encourage them to get their eyes tested.

Glaucoma is the leading cause of avoidable blindness worldwide, affecting over 300,000 Australians¹, yet it is estimated that 50% of those living with glaucoma are undiagnosed¹.

While nine out of 10 Australians say that sight is their most valued sense², a large proportion of Australians are still not having regular eye tests.

Glaucoma Australia CEO Annie Gibbins said "We want to dispel the myth that glaucoma only affects the elderly, which is why we are launching this new risk awareness campaign during World Glaucoma Week. We want to encourage anyone at risk of developing glaucoma to get their eyes tested, especially if you have a family history of glaucoma as you are 10 times more likely to develop glaucoma if you have a direct relative with it."

If you have a family history of glaucoma, are of Asian or African descent or are over 50, you



have a higher risk of developing glaucoma⁴. Other risk factors include diabetes, myopia (nearsighted), prolonged cortisone (steroid) use, migraines, a previous eye injury or eye operation and a history of high or low blood pressure⁴.

"Glaucoma Australia recommends all Australians 50 years or older visit an optometrist every 2 years for a comprehensive eye exam, and if you have a family history of glaucoma or are of Asian or African descent we recommend you get your eyes checked every 2 years from the age of 40." Ms Gibbins added.

"Glaucoma is often nicknamed the 'silent thief of sight' because people almost never see it coming. There are no early symptoms for the

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From the CEO



Over the past few months the Council has overseen a collaborative review of our brand identity and its affinity to those we seek to engage.

This important process has led to our new logo, tagline 'saving sight' and risk awareness campaign being launched in time for World Glaucoma Week and The World Glaucoma Congress. I hope you feel our new look reflects the more modern, active and relevant organisation we are becoming.

In addition to our ongoing family link campaign, the new risk awareness campaign has been designed to create greater awareness of broad ranging alaucoma risk factors. This digital and paper based campaign will be promoted heavily in ophthalmology, optometry and pharmacy practices throughout the year with the strong aim of driving earlier testing for those at risk.

Stronger relationships and improved digital referral systems have resulted in more than 2000 referrals being received over the past year and we are thankful that sight saving interventions can be made by our educators on a daily basis. Ongoing support from generous bequestors, donors and corporate partners is sincerely appreciated.

I've been thrilled to see so many personal stories being shared by those in our community. Building stronger relationships is a wonderful way to support each other and provide encouragement to others on a similar journey.

Annie Gibbins CEO

Cover Story

Don't be blindsided by glaucoma (continued)

most common form of glaucoma and before you notice anything unusual with your sight significant vision may have already been lost forever" said Glaucoma Australia Optometry Committee Chair, Dr Ben Ashby.

"We want to save people's sight. A standard eye test with your local optometrist can detect glaucoma before you even know there might be a problem. Ensuring you and your family are checked at least every 2 years is the first step towards eliminating glaucoma blindness in Australia" he said.

"Vision loss from glaucoma can be devastating and irreversible. However, early detection and treatment to lower eye pressure can halt glaucoma and save sight for life" added Glaucoma Australia Ophthalmology Committee Chair Dr Simon Skalicky.

Glaucoma Risk Factors

Although anyone may develop glaucoma, some people have a higher risk – they are people who:

- · have a family history of glaucoma
- · are aged over 50
- · are of African or Asian descent
- have diabetes
- have myopia (nearsighted)
- · have been on a prolonged course of cortisone (steroid) medication
- · experience migraines
- · have had an eye operation or eye injury
- · who have a history or high or low blood pressure.

(Abridged: NHMRC Guidelines, 2010) This article is republished courtesy Insightnews.com.au

Future brighter for Australian glaucoma patients



The future looks brighter for Australians with glaucoma with recent advances in surgical treatment and upcoming improvements in drug delivery likely to improve treatment adherence and efficiency, according to the authors of a narrative review published in the Medical Journal of Australia.

Glaucoma is an irreversible progressive optic neuropathy for which the major proven treatment is to lower intraocular pressure (IOP). It is the most common cause of preventable blindness in the world, and the prevalence in Australia is estimated at 3%, with perhaps half of that patient population unaware they have the disease.

Current management involves medical therapy (predominantly IOP-lowering eye drops), laser or surgery, depending on the underlying cause and stage of the disease.

However, according to the review authors – Professor Ivan Goldberg, Head of the Glaucoma Unit at the Sydney Hospital and Sydney Eye Hospital, and his colleague Dr Jed Lusthaus – compliance with eye-drop treatment is "one of the toughest challenges in the management of glaucoma".

"Even in a study in which patients knew they were being monitored with an electronic device, they did not consistently take their drops in 45% of cases," Goldberg and Lusthaus wrote. "There are multiple reasons for reduced treatment adherence, including medication side effects, poor understanding of treatment aims, poor instillation techniques (including physical barriers; eg, arthritis and tremor), and cost.

"IOP-lowering eye drops have evolved to improve adherence rates. There are now many commercially available fixed combination eye drops, which enable two agents to be instilled with a single drop ... improving convenience and thus adherence."

The latest surgical intervention techniques are becoming less invasive and are therefore being used earlier in management of the disease, the authors wrote.

There are novel drug delivery systems now in clinical trials, including drug-eluting punctal plugs, conjunctival ocular ring inserts, subconjunctival injections and implants, and intracameral implants.

Goldberg and Lusthaus emphasised the role of non-specialists, particularly GPs.

"Encouraging all patients to regularly seek review by an eye care professional every 1–2 years from 50 years of age facilitates earlier detection and treatment," they wrote. "Risk factor identification in the context of increasing age should raise suspicion for glaucoma. These risks include family history, obstructive sleep apnoea, vasospastic syndromes (migraine, Raynaud phenomenon), systemic hypertension, and diabetes mellitus.

"Health care professionals, particularly general practitioners, can assist by encouraging management adherence."

The Medical Journal of Australia is a publication of the Australian Medical Association.



In The News

Glaucoma Australia launches new brand identity

On 27 February Glaucoma Australia announced the launch of its new brand identity with a redesigned logo and tagline. These changes come at a time when the organisation is evolving the services it provides to alaucoma patients and health care providers.

"All companies and organisations need to stay up to date and accurately reflect stakeholder needs" said Annie Gibbins, CEO Glaucoma Australia.

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"Our market research around the past, present and future direction of Glaucoma Australia has indicated that perhaps one key element (our brand identity) has not kept pace with the evolution of the organisation and the environment in which we operate.

"After many years with our logo, we felt it was time to



update our brand identity, to ensure it reflects the more modern, active and relevant organisation we are becoming."

The spherical graphic of the new brand identity is a modern interpretation of an eye. It has been developed to be representative of the continuing cycle of care. intraocular pressure and peripheral vision. Its fresh, cool, relaxed colour palette denotes calmness and embodies our aim of easing the glaucoma journey with support and knowledge.

The new brand approaches the depiction of an eve in an abstract, contemporary and interpretable form, reflecting both the variance of the disease and its progress, and the breadth of support provided by Glaucoma Australia.

The new identity positions Glaucoma Australia as a confident, modern oraanisation whose work is centred around, and dedicated to, saving sight.

The new brand identity was launched ahead of World Glaucoma Week (10-16 March 2019) and will be rolled-out across all collateral in the coming months.

Volunteer

Gaela Hilditch talking vision



During World Glaucoma Week (10-16 March) volunteer Gaela Hildtich spoke

with Vision Australia Radio host Stella Glorie on the weekly program Talking Vision. On the show Gaela talks about living with glaucoma and the glaucoma support group she runs in Perth.

How did you know you had glaucoma? What were some of the initial symptoms?

I can't stress enough that for most people there are usually no symptoms when you first get it, but for myself there were. I guess I fall into a different category, because in my early 20s I sustained a squash ball injury to my right eye. As I approached 50 I was beginning to get a red eye and there were also blanks or blind spots in the print that I was reading when I was under stress. That prompted me to go to the optometrist and then of course later on I did get a diagnosis of glaucoma.

Can you tell us what happens in your glaucoma support group?

I've been running it now for 6 years. The great thing is we get 50 to 80 people coming to Et ut laci res que veliguam, guam fugit esto volestotatur aut exerovi tasiminctust aut pellacepudam faccabore cus voluptat et volorep elicide bitios voluptate cum quis

our meetings, and I think that it is because there is nothing quite as good as discussing vour condition with other people who know what you're going through.

I ensure we've got top alaucoma specialists at those meetings who are kind enough to share their Saturday afternoons with us. They usually give a talk for about 45 minutes to an hour. then they answer questions from the floor and then they very generously stay behind for our afternoon tea and answer more personal questions. This is very reassuring for us.

What's the reassuring part? When you have a guest speaker what does this do for people?

They are able to give us so much more information. They answer questions coming from the floor, often which they don't have time to answer in a

busy practice. They share with us whatever new information is coming forward, new surgery that might be available, new medication that is available.

We're also organising a coffee and chat meeting later in the year because some people said let's just have a coffee and chat without necessarily having a formal meeting so we are doing that as well.

So what made you decide to take this on?

Well the person who was running it for 15 odd years decided to retire from that position and I thought this is such a good thing I can't just let it go by the wayside. So I ended up taking it on because I had got so much out of it myself.

The next Perth support group meeting will take place on Saturday 27 April. For more information visit glaucoma. org.au/events/perth-supportgroup/. Alternatively contact Gaela on 0416 074 415 or email gaela12@hotmail.com

If you would like to commence hosting meetings in your area please contact Glaucoma Australia on 1800 500 880 or email glaucoma@ glaucoma.org.au



Branded vs Generic: Which eye drops do you choose?

Written by Dr Lisa Nivison-Smith and Sophia Zhang

The use of generic versus branded medication is an ongoing topic of debate among all healthcare practitioners. Are generic drugs just as effective as branded medication? Should we be selecting 'brand substitution not permitted' when filling out a prescription?

As optometrists, understanding the difference in drug efficacy, safety, and tolerability of aeneric and branded medication allows us to appropriately prescribe glaucoma, antibiotic and anti-inflammatory eye drops.

What is a generic drug?

Before a branded drug can reach a pharmacy shelf in Australia, it is researched, developed and produced in a laboratory, tested in a clinical setting and then approved by the Therapeutic Goods Administration (TGA). The branded medications are patented so that they can be exclusively sold by the innovating company.1 Once the patent expires, generic drugs can then be manufactured by other companies.¹ According to the

TGA, a generic version of a drug must contain the same 'active ingredient' and it must be proven to achieve the same bioequivalence as the branded drug.^{1,2} This means that the amount of drug absorbed by the body must be equivalent.¹ It must also have the same strength, dosage, labelling, and indications for use.²

Generic drugs are generally available at a considerably lower cost as the pharmaceutical developer is not required to perform clinical trials to establish the product's efficacy and safety.² This is a key consideration in the treatment of chronic conditions such as glaucoma,

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where the cost of the medication can influence patient compliance.³ When generic latanoprost was first introduced in March 2011.³ adherence rates to therapy significantly improved once patients were switched from the branded to the generic formulation.3

Is there a difference between generic and branded?

Several studies have questioned the clinical efficacy of generic drugs in comparison to the branded counterpart. Commonly prescribed branded glaucoma drugs Xalatan and Timoptic XE were shown to have a greater intraocular pressure (IOP) lowering effect than their generic equivalent.^{4,5} Timoptol XE showed a mean IOP lowering of an additional 1.4mmHg compared to the generic equivalent. In the second study, when participants on generic

latanoprost were switched to branded Xalatan, a greater IOP lowering effect was further seen.⁴ This raised concerns as a reduced IOP lowering effect could translate to progressive visual field loss.⁴

Possible explanations for these differences are the inactive ingredients inside the bottle. Although the active ingredients are equivalent, inactive inaredients such as preservatives, pH and tonicity adjusters may differ.^{2,5} These variables can affect the pharmacokinetics of the drug by interfering with drug ionisation and activation.^{2,6} Particulate size is another factor to consider, especially in suspensions.⁶ In generic prednisolone acetate, particulates were larger and more likely to agalomerate, which led to inconsistent concentrations within each drop.⁷ Other factors such as retention time, eye drop size and bottle design can also impact the therapeutic delivery of the drug.8,9

While several studies suggest clinical inferiority of generic medications, many of these studies were not double blinded and may be confounded by negative patient perception and



expectations.¹⁰ Since generic drugs are sold at a lower cost, patients often translate this to lower production quality.¹⁰ Patient apprehension towards generics can lead to reduced perceived effectiveness and increased perceived adverse effects.¹¹ Healthcare practitioners may need to appropriately educate patients to strengthen confidence in generics if prescribed.¹⁰

The verdict

Generic drugs are widely used and appear to be a relatively safe and effective alternative to their branded counterparts. Their use is particularly beneficial in promoting compliance in the treatment of chronic conditions or for patients on multiple drug treatments. However, some studies have suggested that although generic drugs contain the same active ingredient, the chemical equivalence may not directly translate into clinical equivalence.¹ Factors such as retention time, particulate size, and pH variations may affect the tolerability, safety and efficacy of the medication.² Therefore patients switching from the branded to generic formulation should be closely monitored and followed up to ensure the desired therapeutic response has been achieved.

This article first appeared on mivision.com.au. It has been reprint ed with the permission of mivision (Toma Publishing)

References available glaucoma.org.au



Research

First human implanted with new eye pressure sensor

A German medical device developer has implanted its first glaucoma patient with an eye pressure sensor, potentially revolutionising future self-management of the disease.

The procedure is part of Implantdata's first-in-human clinical study to validate the EYEMATE-SC sensor implant, which resides in the eye and is designed to allow continual monitoring of intraocular pressure (IOP).

Principal investigator Professor Peter Szurman, of the Eye Clinic Sulzbach, Knappschaft Hospital Saar, performed the

surgery, placing the device in the eye's suprachoroidal in conjunction with non-invasive glaucoma surgery.

"The new Implandata sensor is pleasantly small and easy to surgically implant; therefore, most patients undergoing glaucoma surgery are likely to be eligible candidates for such a pressure sensor," he said.

"This breakthrough product enables alaucoma patients for the first time to monitor their own eve pressure at any point in time. I expect that it will improve therapeutic compliance and also significantly reduce the risk of

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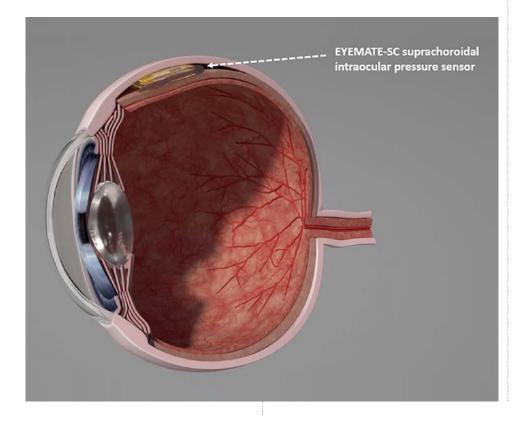
unnecessary visual field loss or even blindness due to alaucoma."

The device is a follow up to the company's CE-marked EYEMATE-IO intraocular sensor implant, which is used on glaucoma patients undergoing cataract surgery.

As current measurement methods can be sporadic and require in-office procedures conducted just a few times a vear, implanted sensors that generate live, at-home IOP readings could be crucial to improving glaucoma selfmanagement.

According to Implant data, earlier studies related to its EYEMATE-IO demonstrate at-home monitoring improves therapy compliance.

"EYEMATE's remote patient care capabilities will result in more efficient disease management, as the number of office visits may be



reduced for a considerable number of patients, while the eye doctor attains more and better information about the patient's specific situation," a company release stated.

"The aggregation of IOP measurement data may [also] shed new light on the emergence and progression patterns of the disease, potentially unlocking new or more efficacious intervention approaches."

Implandata is expanding its study to include the Ophthalmic Clinic of Ruhr-University Bochum, the Department of Ophthalmology at University Mainz, and the Montchoisi Clinique Lausanne.

The Data Safety Monitoring Board, chaired by Professor Emeritus Günter Krieglstein the former Director of Department of Ophthalmology of Medical University Cologne - will track the progress of the study, which should be completed by 2020.

This article is republished courtesy Insightnews.com.au.

My Glaucoma

Kevin's glaucoma story



I was diagnosed with glaucoma 31 years ago, when I was 25 years old. I was working on a building site in London, on night shift. I noticed halos (coloured

rings) around the artificial lights used at night to see by. I asked other workers if they could see the same. "No" was their reply.

Later I attended outpatients at a nearby hospital that treated eyes. I was tested and my pressures were checked for the first time, with both eves recording pressures of 42–46. I was immediately admitted to the hospital and stayed there overnight, where I was drenched in eye drops to reduce the pressure.

A few weeks later I visited an ophthalmic surgeon who diagnosed me as having glaucoma, and told me what poor condition my eyes were in. For example, he knew I'd lived in a hot, dry sunny country from inspecting my eyes. I'd never worn sunglasses before then and holidayed near the beach. My eyesight wasn't the best either.

He prescribed eye drops to be taken daily for the rest of my life. He inquired about my family's history and I was able to tell him that glaucoma was one of the things listed on my mother's death certificate (after her recent death). The year was 1987, I was 25 years old.

Upon my return to Australia I visited a great ophthalmic surgeon Dr Stan Franks who has operated and prescribed medication to me over the years.

I've done the best I can with the knowledge Glaucoma Australia and others have provided to me. I'm forever grateful that I was diagnosed early and not much damage was done.

I have four brothers and two of them have been diagnosed with glaucoma.

Our Supporters

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Many thanks to the companies, clubs and organisations who provided financial and other support to Glaucoma Australia:



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In Memorium

We acknowledge with gratitude gifts, from family and friends, in loving memory of Manuel Xenikakis.

Bequests

The estate of the Late Barbara Joy Chappell. The estate of the Late John Clifford Baker. The estate of the Late Margarita Grunberg. The estate of the Late Beryl Floyd.

Giving HOPE

A gift in your will can help eliminate alaucoma 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/registration

Call our free support line

1800 500 880

Contact details

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glaucoma.org.au



Your Questions Answered



What is drv eve?

Dry eye is a common problem affecting between 5% and 35% (up to 50% in DEWS II) of the population. It is a complex condition with multiple factors that contribute to an unstable and imbalanced tear film. The resulting tear composition is no longer able to adequately lubricate and protect the surface of the eye which leads to irritation and inflammation.

What are the causes of dry eye?

Broadly speaking, the two major causes of dry eye are insufficient tear production and excess evaporation of tears. Commonly, these two factors exist together. Both of these are associated with aging but also with medical conditions of the body or eye, environmental factors and medications.

What are the symptoms of dry eye?

Dry eye is a complex condition and can have a wide range of symptoms. Commonly, patients report irritation in the form of itching or burning, foreign body sensation, the perceived need for increased blinking or eye rubbing. Paradoxically, the eyes can also become watery as a reflex response to

Dry eye and glaucoma

Written by the Glaucoma Australia Optometry Committee

irritation. Sometimes, the vision may be affected or fluctuate. These symptoms overlap with many other eye conditions and should be investigated by your eye health practitioner.

How is dry eye treated?

The recommended treatment for dry eye will depend on the cause identified by your eye health practitioner. It may involve a combination of changes to your environment, lifestyle, diet, eye drops or medications. Home-based therapies may be recommended, and in more severe cases, surgery, contact lenses or in-office procedures may also be an option.

Why does dry eye affect people with glaucoma?

There are many contributing factors to both dry eye and glaucoma. One significant common factor is that the risk of both conditions increases as we age. As such, it is not unexpected that many people with glaucoma also experience dry eyes. There are also some medical and surgical treatments for glaucoma that may have sideeffects that contribute to dry eye or mimic dry eye. If you are concerned about any change to your eyes, you

should discuss this with your eve health practitioner.

What should people do if they suspect they have dry eye?

If you are experiencing symptoms of dry eye then it is best you consult with your eve health practitioner. It is important to not change your glaucoma management without first consulting your optometrist or ophthalmologist. They will work with you to find the best treatment for your lifestyle and with the most acceptable side effect profile.

What do people with glaucoma and dry eye need to be conscious of?

Dry eye can be exacerbated by preservatives that are present in some glaucoma medications. Also, some glaucoma medications can cause symptoms similar to dry eye, or exacerbate pre-existing dry eye. These symptoms should be discussed with your eve care practitioner so that they can work with you to find the most appropriate glaucoma management and medication options for you. It is important to not to change your treatment without first consulting your optometrist or ophthalmologist.