September is Save our Sight Month

Introduction

As every doctor knows, people who feel they can see well enough don't always have eyes that are in perfect health.

Many people put up with poor vision because they think it is due to age or perhaps they do not even notice that glaucoma, AMD, or diabetes is robbing them of sight until it is too late.

To reduce our high levels of preventable blindness in New Zealand, it is vital for everyone to look after their eye health and have a comprehensive eye exam at regular intervals. This is the message the NZ Association of Optometrists is sharing with New Zealanders throughout their month-long Save Our Sight campaign in September.

Running since 2002, the national annual campaign has three main aims:

- To improve the eye health of New Zealanders by letting people know a regular eye examination by an optometrist can save their sight.
- To improve understanding among New Zealanders that eye health is an essential part of maintaining personal health and wellbeing and they can take action by scheduling an eye examination at regular intervals.
- To educate people about the realities of living with impaired vision and the importance of vision for performance at school, at work, and at play.

We are trying to break the link between eye exams and getting glasses in much the same way GPs have had to educate their patients that a GP appointment does not always mean they will be prescribed medicines.

The Save Our Sight focus is long term. It is an effort to change attitudes towards positive action for eye health; and this takes time.

If a person has never experienced vision problems, they are probably unlikely to book an eye exam. However, eye diseases are often asymptomatic in the beginning and, when a person eventually starts to notice a loss in their vision, it is too late to reverse the loss and treatment is then aimed at protecting the vision that remains.

Save Our Sight is about encouraging early intervention, ensuring that New Zealanders maintain the best vision they can for the longest time possible. Losing vision is devastating and generally irreversible. People with poor vision have higher rates of depression, more falls and fractures, increased need for community and/or family support, and earlier need for institutionalised care than people that can see well.

According to the World Health Organisation, 75% of the world's blindness is preventable. The NZAO wants to lower the number of New Zealanders who go blind from preventable causes, and this can be achieved by ensuring that everyone in New Zealand has their eyes checked at regular intervals.

So what is a regular interval for comprehensive eye exams?

A regular interval for comprehensive eye exams depends on age, risk factors, and eye health

For very young children there are specific screening checks that will trigger a referral to ophthalmology. Later the B4SC and the screening by Vision and Hearing Technicians are intended to identify children with some specific vision problems such as amblyopia and myopia. Other children may have latent refractive issues such as hypermetropia or aniseimetropia which may affect their ability to cope with visual demands as learning tasks become more complex.

Children will benefit from a comprehensive examination of eye health and visual function whenever they experience symptoms indicating they have difficulty with visual perception or visual processing. The examination can identify eye health and vision issues which can be treated/ managed or may indicate that referral to other specialist services, such as neurology, would be appropriate.

For young adults in the 16 to 24 age group the most common problem is accelerating myopia progression. Since this is also the age at which driving skills are developing and confidence is increasing good vision on the road will be very important. A comprehensive eye exam at 16 is recommended for all young adults and frequency of recalls thereafter will vary depending on the existence of any specific conditions.

For otherwise healthy adults a comprehensive eye exam every 3-5 years is recommended until the age of 45 years.

Over 45's should consider regular eye exams 2-3 yearly and attention should be drawn to risk factors for particular eye conditions. A comprehensive eye exam is recommended every year for people over 65 years of age.

Risk factors for eye disease to keep in mind

For AMD

- Age,
- Smoking,
- High cholesterol
- Vascular disease
- Having immediate family members who have AMD
- Women appear to be at greater risk than men.

For Glaucoma

- Having a parent, brother or sister with glaucoma
- Being over 60 years old
- Being of a specific race: for primary open angle glaucoma being a black American; for angle closure being Inuit or Chinese
- Having certain medical conditions: high blood pressure, diabetes, thyroid disease, or a history of migraine.
- Taking steroids over a prolonged period
- A history of eye injury
- Injuries that have involved sudden blood loss
- Being myopic (short sighted) for primary open angle glaucoma; and being hyperopic (long sighted) for angle closure glaucoma

For Cataracts

- Having diabetes
- Smoking
- Frequent exposure to UV

The **Save our Sight** campaign seeks to encourage people to look past the glasses and focus on the professionals who provide their eye health and vision care. We hope that General Practitioners will also think about the professional services that optometrists can offer and encourage eye exams where they are clinically appropriate.

It is worth considering that although the traditional referral route for eye patients referred from general practice is to private ophthalmology or to the hospital eye department, both of those options have limited capacity. The big three sight-threatening conditions are more common in older people and now we have an increasing number of older people who will be expected to live longer. Waiting lists are not getting any shorter and prioritisation in the public hospitals is becoming ever more standardised and rigorous. Perhaps your local optometrist can help.

Patients with Cataract

You may have patients with early cataract. If these are bothersome for the person and he or she has health insurance there may be no problem; but what about the person without such insurance who is experiencing reduced quality of life through the disruption to their normal vision from their developing cataract. Referral to an optometrist might provide some certainty regarding the priority score for such a patient. The most current cataract prioritisation tool is being made available on line and can be completed by an optometrist. Some DHBs are already considering optometrist direct booking on the basis of local thresholds and score on the CPAC tool. Referral to an optometrist might help you do the best for your patient and will certainly ensure that you get the detailed information into your own records for future reference.

Patients with Macular Degeneration

The National Health Committee has recently published a report articulating the current model of care for patients with age-related macular degeneration (AMD) with the aim of identifying interventions that have potential to improve health outcomes and efficiency. The report notes that AMD is the leading cause of blindness in New Zealand in those aged over 50, accounting for half of all cases. It is estimated that 15,000–30,000 people in New Zealand are affected by late (advanced) AMD, with 10,000–20,000 affected by the more severe and rapidly progressive wet form. The prevalence is expected to increase by 20–40% in the next 10 years as a result of population ageing. The number of people aged 45–85 years with AMD is estimated to increase by 13% by 2026, and those with late AMD by more than 40%, with a resulting increase in costs of treatment of AMD.

In early AMD, abnormalities develop in the retinal pigment epithelium (RPE) and lipid deposits (drusen) form underneath the RPE. When eyes are affected only by drusen and early RPE irregularities, people do not usually suffer noticeable vision loss, although some may have subtle distortions in vision. As the disease progresses, the macula becomes thin and can start to break down. About 4% of patients with early AMD progress to late AMD each year. In total 10−15% of patients with AMD progress to the wet (late) form.

It is estimated that 75-80% of AMD patients currently within the hospital system have early AMD and are not having any treatment. Eye clinic resources can get seriously overloaded and not all these people will have review of their condition at optimal times. This could be an area where General Practice and optometry working together can improve patient care without the need for hospital visits.

Extra information may be helpful

Patients with Glaucoma

Some DHBs are having to strictly prioritise referrals for patients suspected of having glaucoma and are requiring a greater degree of information in referrals to enable appropriate prioritisation for a first appointment.

While those with consistently raised intraocular pressure will be seen, i.e. pressures above 21 mmHg, those with normal tension who have signs of a field defect may not.

A referral that documents confirmed field loss using either the Medmont Glaucoma or Humphrey 24-2 field analysis program allows the specialist to more accurately gauge priority for the patient in that situation.

So for some patients it might be worthwhile referring to an optometrist who has therapeutic endorsement and is an authorised prescriber. You can locate a therapeutic optometrist in your area from the NZAO website homepage (www.nzao.co.nz). Click on the link 'Locate an optometrist who can prescribe eye medicines' which is on the right hand side of the home page in the list under the picture of an optometrist using a slit lamp.

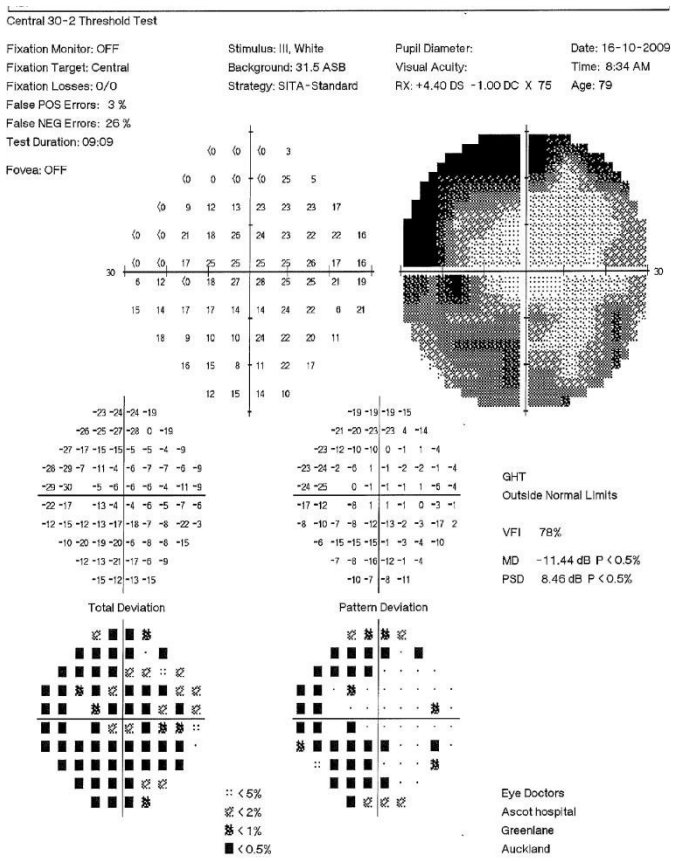
You might also think about getting an optometrist report for any stable glaucoma patients referred back from the eye department especially if they have had their recall time extended due to capacity constraints in your local DHB.

Other sight threatening Conditions

The example to the right is a threshold fields analysis of the left eye of a 79 year old male patient using a Humphreys 30-2 analysis program.

The patient had normal confrontation with finger counting but reported vision as cloudy or blurry.

Fig 1. Visual Fields - Humphreys 30-2 analysis program



Fields analysis showed a diffuse defect worse on the temporal side with respect to the vertical midline and encroaching to within 10 degrees of the centre of fixation.

After further specialist investigations including CT scans, the patient underwent craniotomy and excision of an extensive sphenoid wing meningioma

At 4 months post-operation visual acuity with spectacles improved to 6/7.5 and the field restriction was pushed back to 20 degrees of the centre of fixation