

Glaucoma



N·Z·A·O

NEW ZEALAND ASSOCIATION
OF OPTOMETRISTS INC.

- Glaucoma is a degenerative disease of the optic nerve



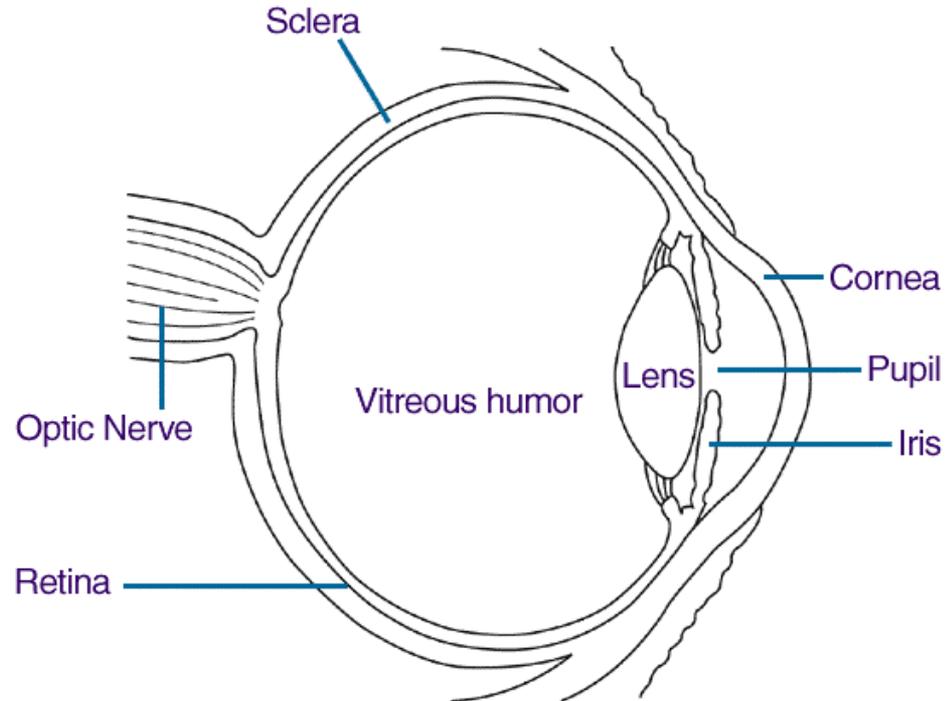
- In its most severe form, glaucoma can result in tunnel vision or blindness.



N·Z·A·O

NEW ZEALAND ASSOCIATION
OF OPTOMETRISTS INC.

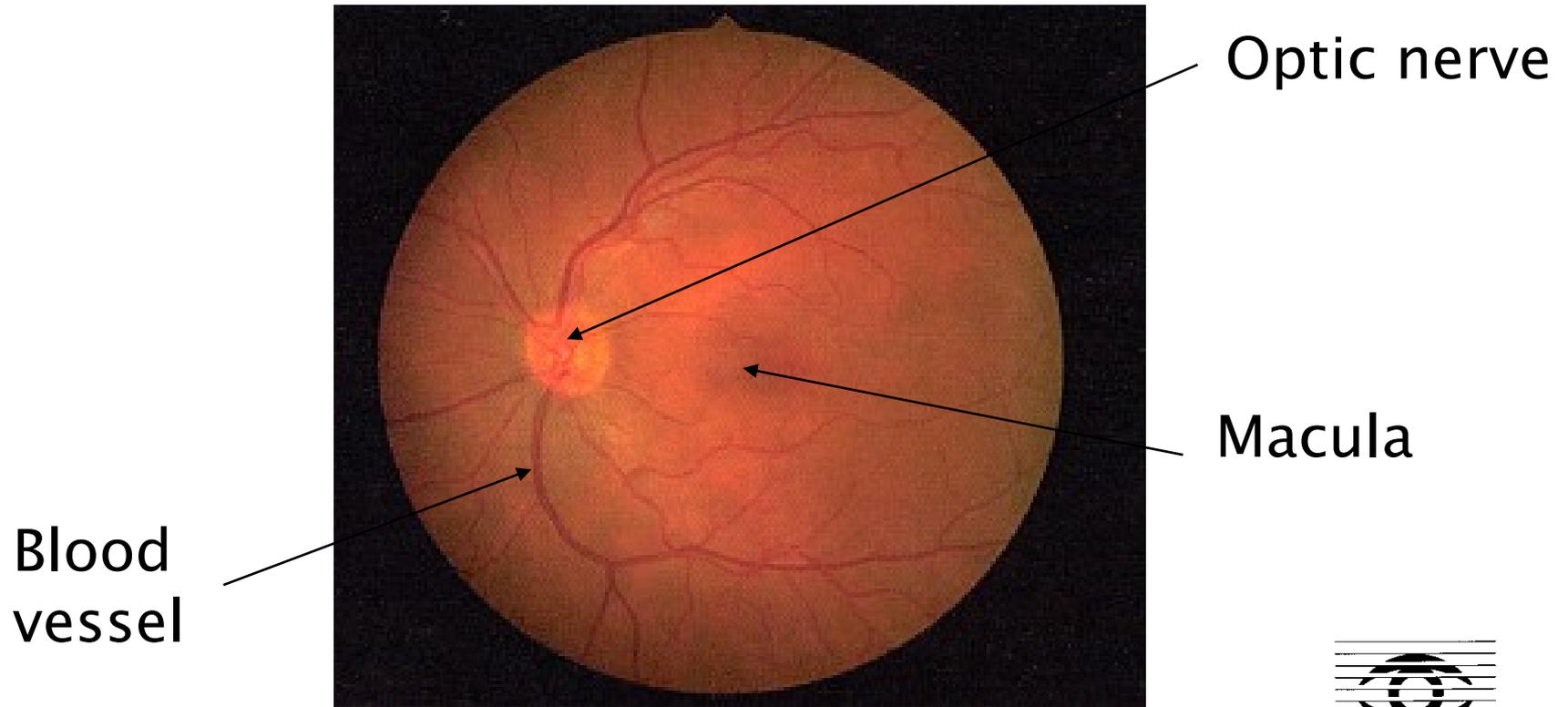
The function of the optic nerve is to transmit information from the eye to the brain



N·Z·A·O

NEW ZEALAND ASSOCIATION
OF OPTOMETRISTS INC.

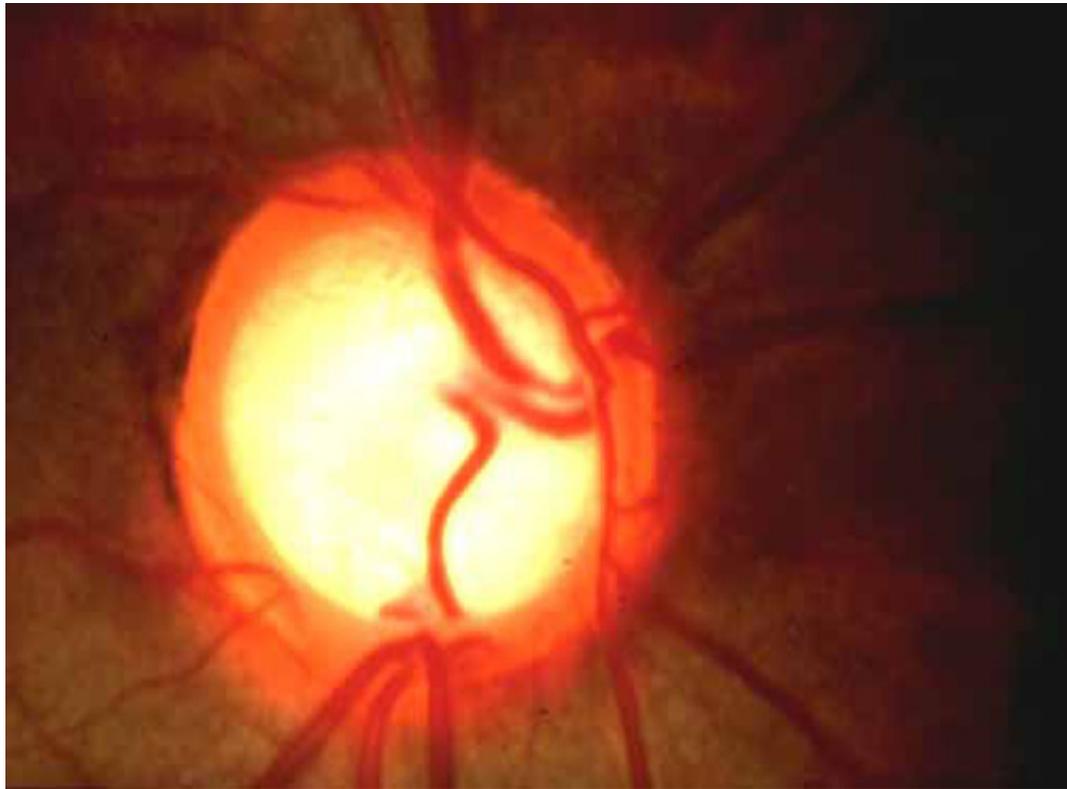
Normal retina



N·Z·A·O

NEW ZEALAND ASSOCIATION
OF OPTOMETRISTS INC.

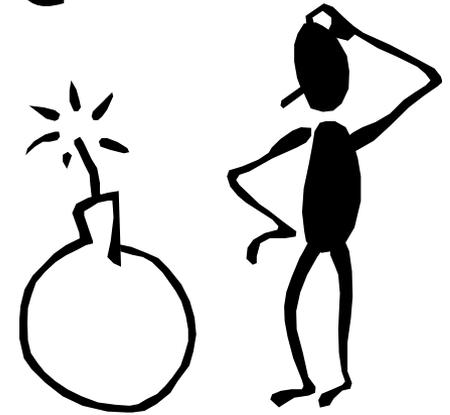
Damage to the optic nerve from glaucoma



N·Z·A·O

NEW ZEALAND ASSOCIATION
OF OPTOMETRISTS INC.

In glaucoma, the pressure inside the eyeball may be higher than normal



As it usually increases gradually, this is extremely difficult to detect yourself



N·Z·A·O

NEW ZEALAND ASSOCIATION
OF OPTOMETRISTS INC.

Main risk factors for glaucoma

1. Age

- over forty



2. Family history

- Siblings, parents



3. Race

- African, Asian



N·Z·A·O

NEW ZEALAND ASSOCIATION
OF OPTOMETRISTS INC.

More risk factors for glaucoma

4. Blood pressure abnormalities
5. Diabetes
6. Significant refractive error
7. Some medications (eg steroids)



N·Z·A·O

NEW ZEALAND ASSOCIATION
OF OPTOMETRISTS INC.

There are several different forms of glaucoma

- Primary open angle
- Acute angle closure
- Secondary open angle
- Secondary angle closure
- Normal tension
- Congenital
- AND MORE!

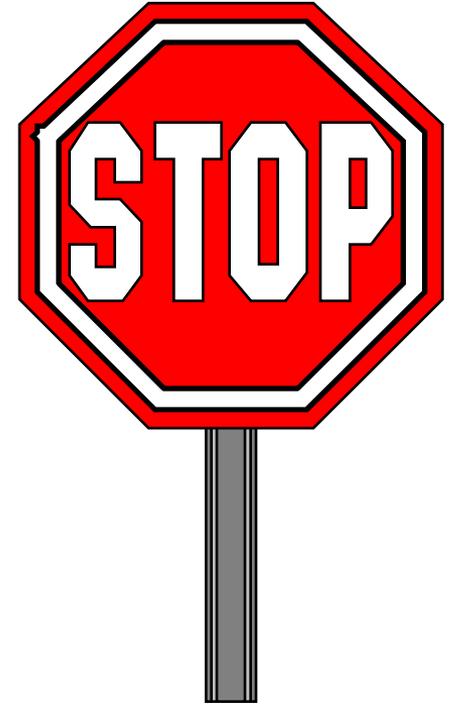


N·Z·A·O

NEW ZEALAND ASSOCIATION
OF OPTOMETRISTS INC.

Acute angle closure glaucoma

- Is an ocular emergency
- A sudden increase in pressure in the eye causes
 - pain, haloes around lights
 - blurred vision
 - sometimes nausea and vomiting
- Need to go straight to hospital



N·Z·A·O

Tests for glaucoma

1. TONOMOMETRY

- Measures the pressure inside the eyeball by
 - Non-contact tonometry
 - a puff of air
 - Contact tonometry
 - usually involves the use of drops



N·Z·A·O

NEW ZEALAND ASSOCIATION
OF OPTOMETRISTS INC.

Tonometry



N·Z·A·O

NEW ZEALAND ASSOCIATION
OF OPTOMETRISTS INC.

Tests for glaucoma

2. OPHTHALMOSCOPY

- Use of a bright light to examine the retina
- Appraisal of the optic nerve head
 - colour
 - shape
 - cup in centre



N·Z·A·O

NEW ZEALAND ASSOCIATION
OF OPTOMETRISTS INC.

Ophthalmoscopy



N·Z·A·O

NEW ZEALAND ASSOCIATION
OF OPTOMETRISTS INC.

Tests for glaucoma

3. VISUAL FIELD TEST

- Usually a computerised test
 - Lights are shone in central and peripheral field
 - A button is pressed when they are seen



N·Z·A·O

NEW ZEALAND ASSOCIATION
OF OPTOMETRISTS INC.

Visual field examination

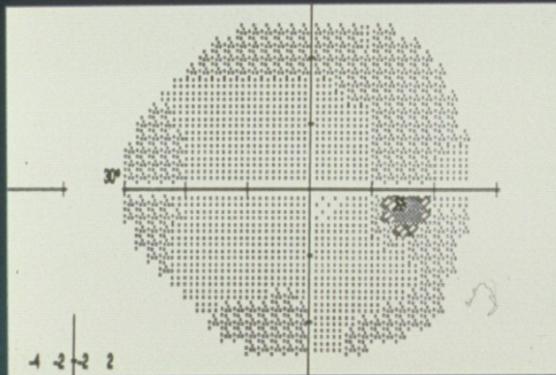


N·Z·A·O

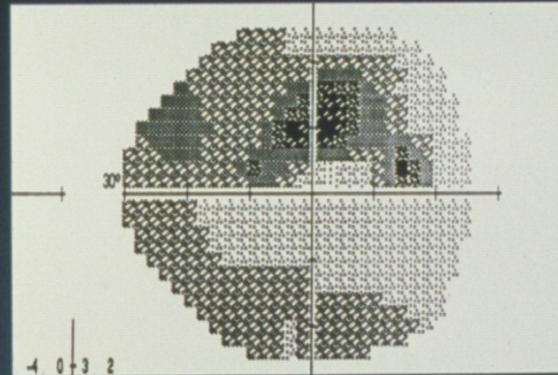
NEW ZEALAND ASSOCIATION
OF OPTOMETRISTS INC.

Visual field results

Normal Visual Field



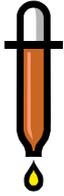
Severe Visual Loss



N·Z·A·O

NEW ZEALAND ASSOCIATION
OF OPTOMETRISTS INC.

Treatment for glaucoma

- Medications 
- Surgery
- Regular monitoring



N·Z·A·O

NEW ZEALAND ASSOCIATION
OF OPTOMETRISTS INC.

- Early detection and treatment of glaucoma is vital

- Once you lose vision from glaucoma you can't get it back



N·Z·A·O

NEW ZEALAND ASSOCIATION
OF OPTOMETRISTS INC.

- In the early stages, self diagnosis of glaucoma is extremely difficult



- It is often hard to notice any changes in your peripheral vision until they are quite advanced

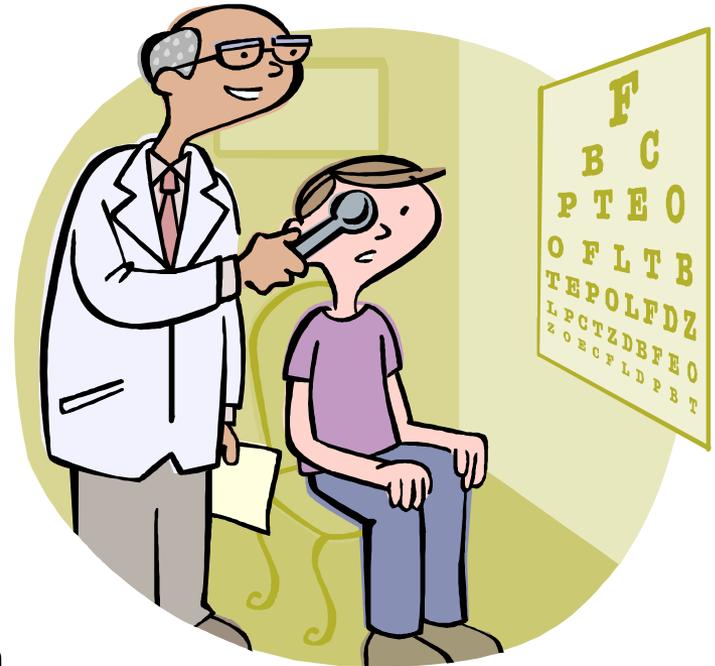


N·Z·A·O

NEW ZEALAND ASSOCIATION
OF OPTOMETRISTS INC.

Regular eye examinations (every two years) are highly recommended for

- Anyone over forty
- Anyone with a family history of glaucoma
- Diabetes, hypertension



N·Z·A·O

NEW ZEALAND ASSOCIATION
OF OPTOMETRISTS INC.

Optometrists

- Detect and diagnose problems with eye health
- Prescribe glasses or contact lenses, if required
- Diagnose and treat problems with focusing



N·Z·A·O

NEW ZEALAND ASSOCIATION
OF OPTOMETRISTS INC.

Optometrists

- Are university educated and regularly undertake continuing professional education
- No referral is required



N·Z·A·O

NEW ZEALAND ASSOCIATION
OF OPTOMETRISTS INC.

How to contact an optometrist

- Yellow pages
- NZ Association Of Optometrists
 - phone 0800 439 422
 - www.nzao.co.nz



N·Z·A·O

NEW ZEALAND ASSOCIATION
OF OPTOMETRISTS INC.