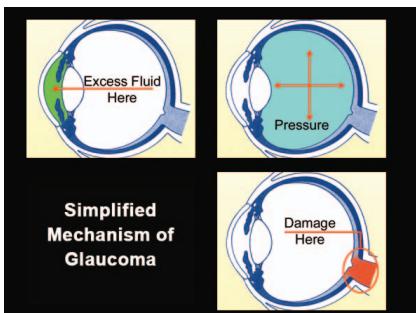


# Common Diseases of The Eye

Tony Hanks, OD

## Glaucoma

- ◆ Glaucoma is a disease where the pressure within the eye is typically increased. This can damage parts of the eye, and if untreated may cause blindness.
- ◆ Symptoms: Many times the symptoms of glaucoma are not noticeable until damage to the eye has already occurred.



A simplified view of the mechanism of glaucoma

- ◆ Diagnosis consists of having regular eye examinations which include a pressure measurement and visual field assessment (usually every 2 years for patients over 40), to enable early detection of possible problems.
- ◆ Treatment: Usually drops to control the pressure, by reducing the inflow or increasing the outflow of fluid inside the eye. In more advanced cases, laser surgery to increase the outflow drainage may be necessary.

## Cataract

- ◆ Cataract is an opacity or clouding of the lens inside the eye that distorts light as it enters.
- ◆ Symptoms: May include a gradual painless decrease in vision, hazy vision, increased sensitivity to glare and even double vision.

- ◆ Special tints or UV filters can often improve vision and slow the development of this condition.

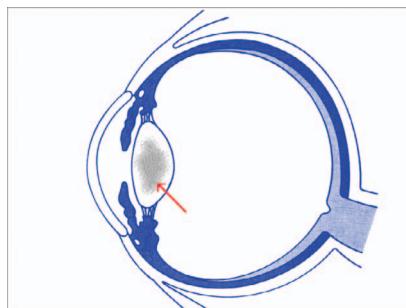


Diagram of cataract formation in the lens of the eye



An advanced cataract may be seen in the pupil

- ◆ Treatment: Eventual "cure" is surgical removal of the lens. This is now usually replaced with an artificial lens for the eye called an "IOL" - an intra-ocular lens.

## Macular Degeneration

- ◆ Macular degeneration is a disease affecting the most sensitive part of the retina (the macula).
- ◆ The degeneration can be age-related, or due to a toxic cause, and results in permanent damage to the important central vision.
- ◆ Treatment: Vitamin supplements & ultra-violet protection can help slow the progress of this condition.

## Pterygium

- ◆ Pterygium is a triangular growth of degenerative tissue on the white of the eye (sclera), that may extend onto the cornea, usually on the nasal side.



Pterygium is a growth on the front of the eye

- ◆ Results from irritation due to long term exposure to UV light, wind, glare or dust.
- ◆ Treatment: By eliminating the irritation with protective eyewear, eye-drops or surgery.

## Spots & Floaters

- ◆ Floaters are semi-transparent specks of natural materials inside the eye, which sometimes can be seen floating in the field of vision.
- ◆ Some patients comment that they look like spots, cobwebs or threads, and most usually notice floaters when looking at a bright plain background.

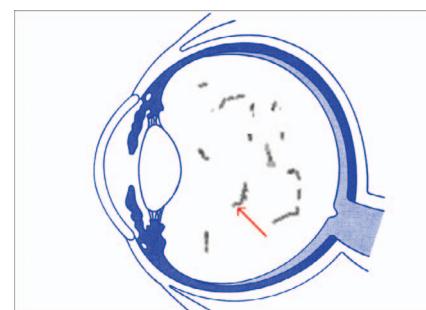
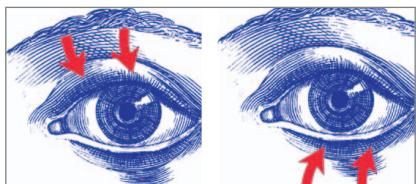


Diagram of spots and floaters within the vitreous

- ◆ Can be caused by debris left over from before birth, injury or eye disease. A sudden onset of floaters can indicate a serious retinal condition.
- ◆ A full examination is needed to determine the cause and whether any follow-up is needed.

## Blepharitis

- ◆ As one of the most common eye conditions, blepharitis is an inflammation around the edges of the eyelids.
- ◆ Symptoms: Sore, red, irritated lids, crusted lashes and a burning foreign body discomfort. Tends to be a chronic ongoing problem for many patients.
- ◆ Treatment: Improved lid hygiene..
  - Warm compresses to soften crusting and unblock glands.
  - "Lid Care" to clean the lids and lashes and lid margins.
  - Ocular lubricants for dryness and sometimes antibiotic eye-drops.



Lid expression technique

- ◆ Often also associated with conjunctivitis, which is an inflammation of the conjunctiva ("pink eye").

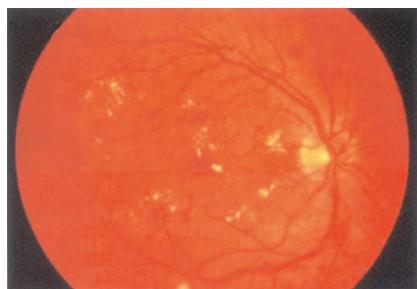
## Diabetic Retinopathy

- ◆ Inflammation of the retina occurs when diabetes damages retinal blood vessels.
  - This causes swelling, haemorrhages and exudates (discharge) on the retina.
  - 30% of all diabetics already have retinal damage. Retinopathy

can be quite advanced in one eye before the patient notices.



View of a normal retina



View of a retina with diabetic changes

- May also proceed to glaucoma, cataract and retinal detachment.
- ◆ Treatment: Laser surgery to the retina, if detected early enough. Best treatment is early detection.
- ◆ Recommendations for all diabetic patients:
  - Annual eye examinations to check for signs of retinopathy.
  - Careful recording of retinal condition (fundus photographs).



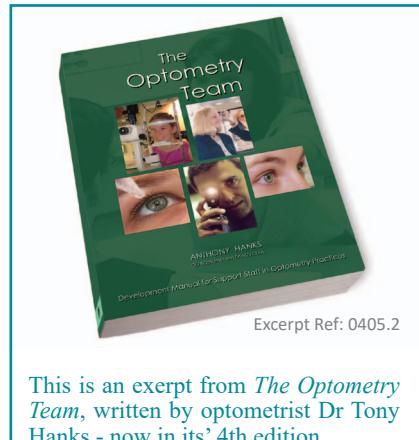
Retinal camera producing photographs that are either polaroid, standard 35mm or digital images.



Digital retinal camera interfaces with a computer for image storage.

## The Interval Between Check-ups

- ◆ The patient's optometrist will advise each individual patient of the interval between visits which is appropriate for their vision and eye health needs.
- ◆ The time varies for different situations (eg: children, elderly, progressive conditions, etc) so we contact our patients when their next routine check is due. This can be from a few months to a few years - however, the average is about 2 years.
- ◆ Of course if a problem arises sooner the patient should always come in then.



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This is an excerpt from *The Optometry Team*, written by optometrist Dr Tony Hanks - now in its' 4th edition.

The book is available on-line from [www.hanksresources.com](http://www.hanksresources.com)