Other eye conditions

There are several other conditions that can affect the eye including:
- optic atrophy (damage to the eye nerves)
- Gonococcal conjunctivitis
- pterygium
- macular degeneration (eye damage due to the ageing process)
- glaucoma
- pseudoexfoliation syndrome
- ocular trauma (injury to the eye).

What is optic atrophy (damage to the eye nerves)?

The optic nerve transports visual information from the eye, to an area of the brain where it is processed. Optic atrophy is the result of worsening or damage to the optic nerve.

What causes optic atrophy?

Optic atrophy is a condition which may be passed down through family, or may result from an injury to the brain, or conditions such as brain trauma, swelling, degenerative disorders, bruising or tumour. It can develop over time or not change at all, depending on the cause of the damage.

How is optic atrophy detected?

The optic disc is the portion of the optic nerve visible when looking into the eye. A pale coloured optic disc is a clinical sign of optic atrophy.

What affect does optic atrophy have on vision?

Vision loss will be different depending on how serious the damage. Due to the nerve damage, optic atrophy is not reversible and therefore cannot be treated. However, in some situations the cause of the damage may be treatable.

What is Gonococcal conjunctivitis?

Gonococcal conjunctivitis is a highly infectious, painful and sight-threatening condition caused by a type of bacteria [1]. Symptoms include intense swelling of the eye and discharge.

What causes Gonococcal conjunctivitis?

This type of bacteria is usually passed between people through sexual contact, but it can also be passed by non-sexual contact. It only survives in warm, moist conditions and dies rapidly in a dry cold atmosphere.
How is Gonococcal conjunctivitis detected and treated?

Medical tests are needed to see if a person has the disease and antibiotics are used for treatment.

What is pterygium?

A pterygium is a triangle-shaped thickening in the inner corner of the eye. It does not produce many symptoms, but in some cases the eye may become red and inflamed. A pterygium can grow over the iris (the coloured part of the eye) and can damage eyesight if it extends over the pupil, through which light has to pass to the retina on the back of the inside of the eye.

What causes pterygium?

It is likely that a pterygium is caused by exposure to the sun and affects people who live in the warm, dry regions of Australia, and people who spend most of their time outdoors. Other reasons include:

• allergies
• irritants (such as wind, dirt, dust, air pollution)
• some chemicals
• possibly family risk.

How is pterygium treated?

The pterygium may be removed by a doctor or ophthalmologist if it grows towards the edge of the pupil or affects the vision.

What is macular degeneration (eye damage due to the ageing process)?

As people get older they can develop macular degeneration, which is damage to the macula (a small part of the retina) that helps a person see fine details. It is a disease that affects the centre of the field of vision, and is a common reason for poor eyesight in people aged 60 years or older.

In the general population, two out of three people will develop age-related macular degeneration (AMD) and one person in four will go blind.

What are the risk factors for macular degeneration?

Getting older and people with a family history are more likely to develop macular degeneration, as well as people who smoke cigarettes.

What are the symptoms?

Symptoms for macular degeneration include:

• blurred vision
• slow recovery of vision after exposure to bright light
• reduced central vision

How is macular degeneration treated?

Low vision aids and support services are available for people with macular degeneration. In some cases it is treated with an injection to the eye, however, there is currently no effective treatment for macular degeneration.

What is glaucoma?

Glaucoma is a condition that leads to poor drainage of the clear liquid that normally flows in and out of the front section of the eye. This causes increased pressure that can damage the nerve cells and lead to loss of eyesight. The symptoms are usually not noticeable to the person affected until damage has been done to eye.

What are the risk factors for glaucoma?

The most common forms of glaucoma increase with age. Unfortunately, half of people with glaucoma do not know that they have the disease and do not receive treatment. Without treatment, people can lose vision and once this vision is lost it cannot be restored. A family history of glaucoma increases the risk at least four times. People with glaucoma need to tell their brothers, sisters, sons and daughters (first-degree relatives) about their family risk of developing glaucoma. People who have a family history of glaucoma need to have their eyes checked regularly. Glaucoma is not common among Indigenous people.

How is glaucoma detected?

To see if a person has glaucoma, an optometrist or doctor examines the eye's nerve fibres and drainage network and measures eye pressure (using an instrument called a tonometer). If it is detected early enough, treatment can slow down or stop further vision loss, but cannot restore vision already lost.

How is glaucoma treated?

Glaucoma is treated by reducing pressure in the eye. Other common treatments include droplet medication, laser treatment, and surgery.
What is Pseudoexfoliation syndrome?

Pseudoexfoliation syndrome is a general eye problem which features the production and build-up of fibrillar material (white, flaky material) over the lens and front surfaces of the eye.

What are the risk factors for Pseudoexfoliation syndrome?

Pseudoexfoliation syndrome is associated with getting older, high pressure in the eye, and secondary glaucoma, but can include genetics (family history) and environmental influences, such as where you live.

How is Pseudoexfoliation syndrome detected and treated?

Pseudoexfoliation syndrome can usually be seen on slit-lamp examination and be treated with medications or laser treatment.

Ocular trauma (injury to the eye)

Ocular trauma (injury to the eye) can occur in many different places such as at work, at home, or playing sport. It can also occur from violence and alcohol abuse. Common injuries to the eye include:

- foreign bodies (dirt, dust or objects)
- irritants (chemicals) in the eye
- scrapes or scratches.

Eye-related head injuries are more common among Indigenous children compared with non-Indigenous children. Injury to the eye can also lead to a higher risk of developing cataract.

References and further reading

5. Thomson N, Paterson B (1998) Eye health of Aboriginal and Torres Strait Islander people. Aboriginal and Torres Strait Islander Health Reviews; 1:
Australian Indigenous
HealthInfoNet

The Australian Indigenous HealthInfoNet is an innovative Internet resource that contributes to ‘closing the gap’ in health between Indigenous and other Australians by informing practice and policy in Indigenous health.

Two concepts underpin the HealthInfoNet’s work. The first is evidence-informed decision-making, whereby practitioners and policy-makers have access to the best available research and other information. This concept is linked with that of translational research (TR), which involves making research and other information available in a form that has immediate, practical utility. Implementation of these two concepts involves synthesis, exchange and ethical application of knowledge through ongoing interaction with key stakeholders.

The HealthInfoNet’s work in TR at a population-health level, in which it is at the forefront internationally, addresses the knowledge needs of a wide range of potential users, including policy-makers, health service providers, program managers, clinicians, Indigenous health workers, and other health professionals. The HealthInfoNet also provides easy-to-read and summarised material for students and the general community.

The HealthInfoNet encourages and supports information-sharing among practitioners, policy-makers and others working to improve Indigenous health – its free on line yarning places enable people across the country to share information, knowledge and experience. The HealthInfoNet is funded mainly by the Australian Department of Health and Ageing. Its award-winning web resource (www.healthinfonet.ecu.edu.au) is free and available to everyone.

Director
Professor Neil Thomson

Address
Australian Indigenous HealthInfoNet
Edith Cowan University
2 Bradford Street
Mount Lawley, WA 6050

Telephone
(08) 9370 6336
Facsimile
(08) 9370 6022
Email
healthinfonet@ecu.edu.au
Web
www.healthinfonet.ecu.edu.au

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