



ANIRIDIA

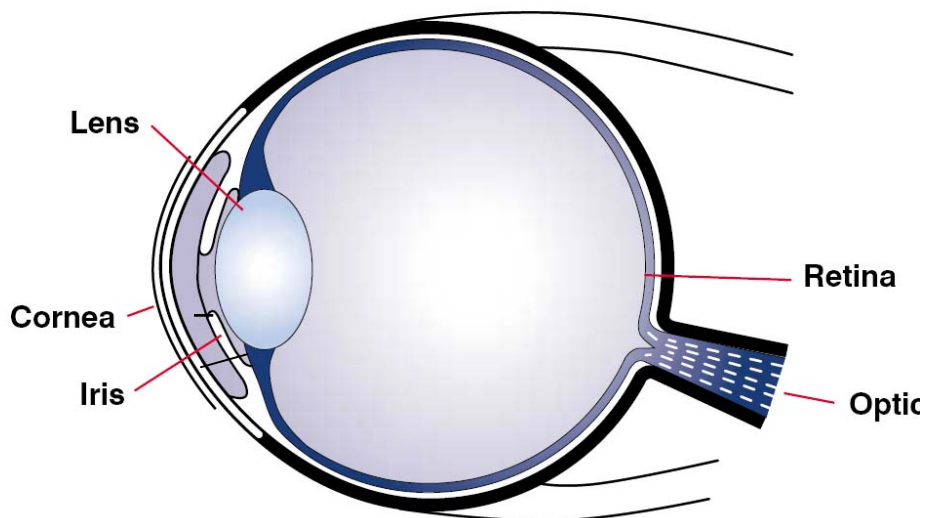
What we see is made in the brain from signals given to it by the eyes.

What we see is in fact made in the brain. The brain makes sight from signals given to it by the eyes.

What is the normal structure of the eye?

The eye is made of three parts.

- A light focusing part at the front (cornea and lens).
- A light sensitive film at the back of the eye (retina).
- A large collection of communication wires to the brain (optic nerve).



- The **iris** is the coloured part of the eye
- The **pupil** is the black hole in the centre of the iris

What is Aniridia?

Aniridia is a congenital condition (present from birth) where the iris fails to grow. This condition often runs in families, but in one third of cases it occurs by chance. Other parts of the eye may also be under-developed and there may be other eye conditions that are connected with Aniridia. Some of these are:

- **Optic Nerve Hypoplasia** – a condition in which the optic nerve is under-developed.
- **Cataract** – a condition where the normally clear lens of the eye becomes cloudy.
- **Glaucoma** - a condition where the watery fluid in the eye fails to drain in the normal way, causing a build up of pressure within the eye.
- **Nystagmus** – a condition where the eyes wobble all the time.

Not all children have all of these conditions.

How does this affect the way my child sees?

- **Blurred vision.** The level of vision will vary and depending on whether other conditions are present as well.
- **Glare.** Because there is little or no iris, this will result in an inability to control the amount of light entering the eye. There may be problems with glare and dazzle especially on sunny days.
- **Photophobia.** The child may be more sensitive to light.

What can be done to help?

There is no operation or treatment that will improve this condition. There are, however, things that can be done to help children with Aniridia to see more comfortably.

1. **Glasses** – tinted glasses can be ordered to help reduce glare and photophobia.
2. **Contact Lenses** – are sometimes used to reduce the amount of light entering the eye.
3. **Peaked cap** - this may also reduce glare/photophobia.
4. **Low Vision aids** such as magnifiers may help in many cases.

How can parents, family, friends and teachers make a difference?

With this condition it is extremely important that you keep ALL your eye appointments. Your child's vision needs to be monitored very closely.

- Be aware of the problems with **glare**. Children may need reduced or shaded light. Blinds and curtains may be useful.
- Wherever possible use **matt surfaces** for desktops, whiteboards, paper, wall, floors etc. Shiny surfaces, snow and water can reflect light causing glare.
- In severe cases, significant adaptation and modification of **curriculum materials** will be essential.
- **School Equipment.** Many children with Aniridia, at Key Stage 2 and above, benefit from using some type of magnifier. This enlarges print making reading less tiring. It may sometimes be helpful to provide a desk stand or a copyholder, which will bring work to eye level and prevent discomfort and poor posture.
- Recognising facial expressions and body language can be difficult. Remember to be closer to the child when talking to them and/or try to show emotions by using the tone of your voice.

Useful contacts.



Birmingham Focus on Blindness

Tel: 0121 428 5200

RNIB

Tel: 0845 766 9999

LOOK (for families with visually impaired children)

Tel: 0121 428 5038

Aniridia Network

www.aniridia.org

Aniridia Network International

17 Sandmartin Crescent

Colchester

Essex

CO3 8WQ

UK

This information is intended to describe most aspects of the condition but each child is different and there will always be exceptions.

Acknowledgements

This leaflet was compiled by a multidisciplinary team from the eye departments at Birmingham Children's Hospital and Birmingham Heartlands Hospital, Birmingham Focus on Blindness and Birmingham Specialist Support Services.