

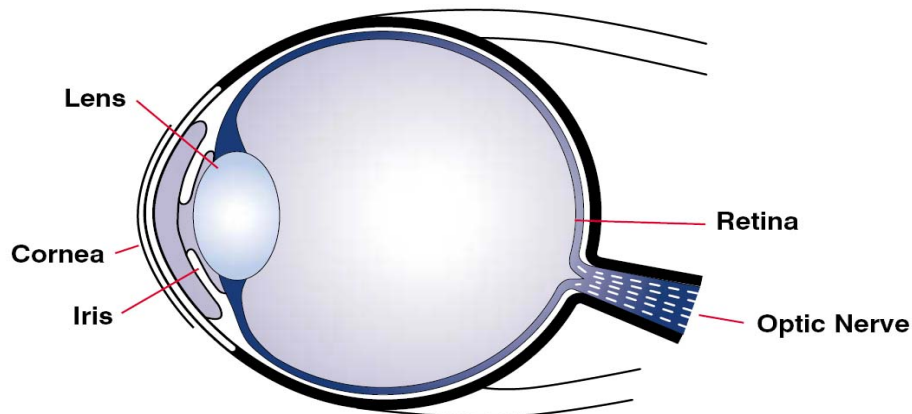
COLOBOMA

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).



What is Coloboma?

Coloboma is present from birth. A part of the eye fails to complete its growth and fuse together and so leaves a gap.

This may affect the eyelid, iris (coloured part of eye), lens, retina and optic nerve.

The pupil of the eye may look teardrop or keyhole shaped. Coloboma may be in one eye (unilateral) or in both eyes (bilateral). There is nothing that can be done to repair the Coloboma.

How does this affect the way my child sees?

The effects of the coloboma can be mild or severe and this will depend on the size and position of the gap.

1. Coloboma of the iris (upside down pear shape or keyhole) will result in difficulty controlling the amount of light entering the eye and problems with **glare**.
2. Where the retina is affected, there will be a loss in the upper **visual field**. This means that children may not notice objects above them. In severe cases, vision may be greatly affected.
3. Your child may be more **sensitive to light** (photophobia).
4. Your child may have a **squint**. This is when one eye turns inwards or outwards. This is because the eyes are not working together. There may be a 'lazy' eye due to the squint (one eye does not see as well as the other).

What can be done to help?

There is no operation or treatment that will repair the 'gap'. There are, however, things that can be done to help children with Coloboma to see better.

1. **Glasses** - tinted lenses may be used if your child suffers from glare.
2. A special **Contact Lens** may be used if there is a misshapen pupil.
3. **Low vision aids** such as **magnifiers** may help in severe cases.
4. **Patch** if there is a 'lazy' eye.

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

1. Be aware of the problems with **glare**. Children may need reduced or shaded light. Blinds and curtains may be useful.
2. Wherever possible use **matt surfaces** for desktops, whiteboards, paper, wall, floors etc. Shiny surfaces, snow and water can reflect light causing glare.
3. Be aware that your child may not see things above their head and so may be more likely to have **bumps**.
4. In severe cases, significant adaptation and modification of **curriculum materials** will be essential.
5. In some cases, where the retina is involved, contact sports and certain fairground rides should be avoided.

Useful contacts.



Birmingham Focus on Blindness

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LOOK (or families with visually impaired children)

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

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.