

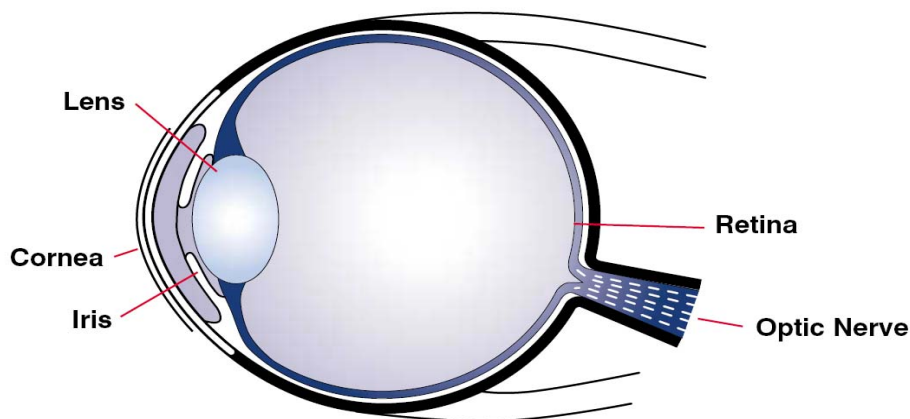
Lawrence Moon Bardet Biedl Syndrome

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).



Retina.

The retina has two types of light sensitive cells called Rods and Cones.

Rods are good at 'seeing'

- Things that move
- In the dark
- In black and white
- Less detail
- Mostly 'outer' / peripheral vision

Cones are good at 'seeing'

- Things that are still
- In daylight
- In colour
- In fine detail
- Mostly 'central' vision

What is Lawrence Moon Bardet Biedl (LMBB) Syndrome?

- This is a condition with several features. These may include:-
 - Extra fingers (Polydactaly)
 - Weight gain
 - Learning difficulties
 - High blood pressure and kidney problems
 - Delayed or absent puberty
- This is a condition that is progressive and affects the rods and cones.
- Most cases are genetic (that is, there is a problem with the chemical make-up of the body).
- In the early stages of the condition there may be no obvious visual problems.
- Peripheral (outer) and central vision may be affected to varying degrees.
- Children may develop nystagmus (wobbly eyes) or roving eye movements.

How does this affect the way my child sees?

Vision.

- If rods are mainly affected then “tunnel vision” may occur.
- If cones are mainly affected then there will be a reduction of central vision.
- Symptoms may vary at different times of the day and different times of the year.
- The visual problems tend to worsen during childhood and become more stable when grown up.

What can be done to help?

- **Genetic counselling.** Ask your eye specialist for help or details.
- **Emotional support.** The child and the family may benefit from this.
- **Mobility.** Advice or training may be necessary.
- Your child may need glasses. They should be worn as advised by your child’s orthoptist, optician or eye doctor.

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

- **Learn about the condition** and how it may affect your child’s vision.
- For some children, **adaptation and modification of materials** may be necessary e.g. large print, desk copies of board work and adapted ICT display.
- **School Equipment.** Many children with Laurence Moon Bardet Biedl Syndrome, 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.

Useful contacts.



Birmingham Focus on Blindness

Tel: 0121 478 5200

RNIB

Tel: 0845 766 9999

LOOK (for families with visually impaired children)

Tel: 0121 428 5038

LMBB Society

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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.

Acknowledgements

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