

# Aniridia



## Description

Aniridia is a rare congenital anomaly where there is an incomplete formation of the iris (coloured part of the eye).

This total or partial absence of the iris causes the eye to appear to have no colour, or appear to have a large black pupil.

The vision loss associated with aniridia is usually from an underdevelopment of the fovea (middle part of the macula responsible for central vision) within the retina.

Aniridia usually affects both eyes and is often associated with other ocular conditions.

## Implications

In aniridia, other complications, or associated conditions, such as glaucoma, cataract, lens displacement or corneal clouding can contribute to decreased visual acuity (sharpness and clarity of vision).

As these conditions are likely, vision needs ongoing monitoring and management.

Aniridia is frequently associated with nystagmus (involuntary eye movement), photophobia (light sensitivity), and poor vision due to foveal hypoplasia (underdevelopment of the fovea centralis within the macula).

Photophobia occurs due to the inability of the partial iris to regulate the amount of light entering the eye, and because as the cornea becomes clouded and irregular, it increases sensitivity to bright light.

Special pinhole contact lenses may be prescribed to control the amount of light entering the eye.

## Accessing the curriculum

Reduce classroom environmental glare. Avoid whiteboards, reflective white paper (buff may provide better access), and instruction next to windows.

Consider seating location to reduce glare.

Use contrasting colour and tones on surfaces.

Consider enlarging print.

Consider the provision of dark lined paper.

Use additional verbal descriptions to support instruction and understanding.

Consider the impact of visual fatigue and offer eye rest time.

Click to see an [Interactive Eye Diagram](#) (web link)

**As this document contains generic information, please consult with the Vision Education Program in regard to individual educational needs.**

## References

- Cassin, B., & Rubin, M. L. (2012). Aniridia. In *Dictionary of eye terminology* (6<sup>th</sup> ed.). Triad Communications, Inc.
- Erin, J. N., & Topor, I. (2010). Instruction in visual techniques for students with low vision, including those with multiple disabilities. In A. L. Corn & J. N. Erin (Eds.), *Foundations of low vision: Clinical and functional perspectives* (2<sup>nd</sup> ed., pp. 398-441). AFB Press, American Foundation for the Blind, New York.
- Ferrell, K. A. (2010). Visual development. In A.L. Corn & J. N. Erin (Eds.), *Foundations of low vision: Clinical and functional perspectives* (2<sup>nd</sup> ed., pp. 229-338). AFB Press, American Foundation for the Blind, New York.
- Holbrook, M. C., Koenig, A. J., & Rex, E. J. (2010). Instruction of literacy skills to children and youths with low vision. In A. L. Corn & J. N. Erin (Eds.), *Foundations of low vision: Clinical and functional perspectives* (2<sup>nd</sup> ed., pp. 484-526). AFB Press, American Foundation for the Blind, New York.
- Lions Eye Institute. (2018). *Eye health information. Interactive eye diagram*.  
<https://www.lei.org.au/services/eye-health-information/eye-diagram/>
- Schwartz, T. L. (2010). Causes of visual impairment: Pathology and its implications. In A. L. Corn & J. N. Erin (Eds.), *Foundations of low vision: Clinical and functional perspectives* (2<sup>nd</sup> ed., pp. 137-191). AFB Press, American Foundation for the Blind, New York.

### For further information

Phone: 08 9402 6409

Email: [sensory@education.wa.edu.au](mailto:sensory@education.wa.edu.au)

Web: [www.ssens.wa.edu.au](http://www.ssens.wa.edu.au)