

Education Challenge List (Achromatopsia)

Take this list with you to your child's school to discuss your child's visual problems. It does not cover all issues, but it is a good starting point to discuss your child's needs in the educational setting.

Terminology

Never use the word blind. Achromatopsia patients are visually impaired and their vision may increase or decrease depending on light exposure. This often creates the paradox of seeing the child function poorly at times (usually in bright light) and other times function quite well (when light is controlled).

Light Aversion

People with Achromatopsia have a severe aversion to bright light, which causes overwhelming glare which reduces the patient's vision dramatically. It is like having floodlights aimed at your eyes. Thus sunglasses and hats may be required even inside. And, the classroom lighting and window shading may require adjustment.

Thus vision will fluctuate up or down depending on the light exposure. Normal room light may be debilitating to the child. Outside activities in bright light such as physical education may severely reduce the child's vision, and potentially endanger the child in some activities.

Visual Acuity

Visual acuity is reduced to the range of 20/80 to 20/200 that may make seeing the overhead projector screen, chalkboard or SMART Board

difficult. Sitting closer to them may help, but may not be enough. Providing handouts to the child may help. The use of a handheld monocular telescope may aid the child.

Because the vision is moderately impaired, many children can hold material closer to read and thus may resist large print materials.

Colorblindness

The colorblindness of achromatopsia is not like the mild pastel color loses that 10% of males and 1% of females have. It is a profound loss of color vision, often a total loss of color vision. The child will not be able to use color coding in educational materials.

Refractive Errors

Most children with achromatopsia have significant refractive errors and thus should be wearing eyeglasses. Eyewear will usually include very dark tints. Often these tints are dark red in color.

Nystagmus

There may be nystagmus (shaky movements of the eyes) that may increase when under stress such as timed tests. The child may need to tilt the head and eyes in a particular way to slow the movement and see better. This is called the null position.

Social and Emotional Adjustment

With the visual problems of achromatopsia, the need for tinted lenses may leave the child subject to bullying and teasing. This should be addressed immediately.

The child may not see well enough to recognize their friend and this should be explained to other children.

Fatigue and Eyestrain

The child with achromatopsia may be prone to eyestrain. The child should be allowed brief rest breaks throughout the day. Adjusting the amount of work the child must complete may sometimes be required.

Physical Education

Physical education is important for all children, but it can, in some cases, be very uncomfortable or even dangerous for a child with achromatopsia.

See the separate article and checklist that may help you discuss these issues with your child's teachers.