



Effective Communications in Hospitals

Promoting Meaningful Communications in Health Care

What is CVI?

Why your child/students may have impaired vision:

Ocular disorders: pathology of the eye(s)

Neurological visual disorders: disturbed or reduced vision due to various brain abnormalities.

The two types of visual disorders (ocular & neurological) can co-exist.

Cortical visual impairment (CVI) is a neurological visual disorder. It is the fastest growing visual impairment diagnosis today.

Definition for Medical Purposes:

Cortical visual impairment (CVI) may be defined as bilaterally diminished visual acuity caused by damage to the occipital lobes and or to the geniculostriate visual pathway. CVI is almost invariably associated with an inefficient, disturbed visual sense because of the widespread brain disturbance.

Definition for Educational Purposes:

Cortical visual impairment (CVI) is a neurological disorder, which results in unique visual responses to people, educational materials, and to the environment. When students with these visual/behavioral characteristics are shown to have loss of acuity or judged by their performance to be visually impaired, they are considered to have CVI.

Note: A student whose visual functioning is reduced by a brain injury or dysfunction may be considered blind for educational purposes if visual function is equal to or less than the legal definition of ocular blindness.

CVI is suspected by:

- a normal or close to normal eye examination;
- a medical history which includes neurological problems; and
- the presence of unique visual/behavioral characteristics.

Four major causes of CVI:

- Asphyxia
- Brain maldevelopment
- Head injury
- Infection

Unique visual/behavioral characteristics of CVI:

- Normal or minimally abnormal eye exam (CVI may co-exist with optic nerve atrophy, hypoplasia or dysplasia and ROP.)
- Difficulty with visual novelty (The individual prefers to look at old objects, not new, and lacks visual curiosity.)
- Visually attends in near space only
- Difficulties with visual complexity/crowding (Individual performs best when one sensory input is presented at a time, when the surrounding environment lacks clutter, and the object being presented is simple.)
- Non-purposeful gaze/light gazing behaviors
- Distinct color preference (Preferences are predominantly red and yellow, but could be any color.)
- Visual field deficits (It is not so much the severity of the field loss, but where the field loss is located.)
- Visual latency (The individual's visual responses are slow, often delayed.)
- Attraction to movement, especially rapid movements.
- Absent or atypical visual reflexive responses (The individual fails to blink at threatening motions.)
- Atypical visual motor behaviors (Look and touch occur as separate functions, e.g., child looks, turns head away from item, then reaches for it.)
- Inefficient, highly variable visual sense