

Introducing- BABIES with CVI

**Nurturing Visual Abilities and
Development in Early Childhood**

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- TVI
- Early Childhood Work
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"BABY"

Term **BABY** as used
in the book refers to a
newborn child through
age 3

Early History and CVI

- German Measles epidemic- Rubella
- San Diego State Pilot Program -'70
- 5 year olds were like infants
- Teaching strategies were not available or taught

ABOUT THE BOOK

Brain plasticity

The ability of the brain to change its activity in response to stimuli by reorganizing its functions, structure, or connections.

Other Issues

- Confusion about the brain and CVI
- Importance of Parents' role
- Understanding the learning needs of babies vs older learners

THE BOOK

- **Reviews:** Information about the Brain
- **Discusses:** CVI -a confusing issue- in basic terms
- **Identifies:** Characteristics of CVI in Babies
- **Clarifies:** How CVI differs from ocular vision issues
- **Offers ideas:** To support parents and build a team
- **Provides:** Strategies and Interventions

Table of Contents

- Chapter 1: Supporting Parents of Babies with CVI
- Chapter 2: The Visual System
- Chapter 3: Cerebral Visual Impairment
- Chapter 4: Creating a Home Action Plan
- Chapter 5: Developing visual Skills
- Chapter 6: Early Visual Development Guide

WHAT WE KNOW

Definition

Cerebral Visual Impairment

a brain related visual
difficulty that
compromises visual
processes

What' Going On?

CVI- the most common bilateral visual impairment in developed countries.

Increasing rates are notable.

CVI vs ocular vision impairment

- CVI and Learning (LD)
- CVI and additional areas of difficulty
 - Sensory integration difficulty
 - Motor difficulties
 - Language/social difficulty
 - Cognitive difficulty

NAME CONFUSION

- Cortical Blindness
- Neurological Visual Impairment
- Cortical Visual Impairment
- Delayed Visual Maturation
- Cerebral Visual Impairment

Characteristics

- Children may not seem “blind”
- Vision is changeable
- Vision needs “priming”
- Vision difficulties change
- Vision functioning is atypical

Areas for Resolution

per Christine Roman-Lantzy

- Color preference
- Need for movement
- Visual latency
- visual field preference
- Difficulty with visual complexity
- Light gazing and nonpurposeful gaze
- Difficulty with distance viewing
- Absence of visually guided reach
- Coexisting ocular conditions

HELPING THE FAMILY

Influencing Success

- Parents
- The environment
- A baby's readiness
- Planning
- Type of interventions

PARENTS' NEEDS IMPACT a BABY'S LEARNING

- Grief
- Baby's health needs
- Support
- Positive Team

Stages of Grief

- Shock
- Sadness
- Denial
- Anxiety
- Guilt
- Resentment
- Bargaining
- Adjustment

Myths about Grieving

- Stages are linear
- When it's done it's done
- It can be hurried
- It can be done well
- It can be done badly
- People have control of their grieving
- People can 'get on with it'

DENIAL

Denial behaviors affect success

- Searching for new opinions/doctors
- 'not that serious'
- 'God will fix this'
- 'they're wrong'
- 'we already do all this'

The Team

- Team approach needed to
 - ❖ Help students realize their developmental potential
- Parents are cornerstone of an effective team
- Parents may be inert from grief

LOTS OF HELP

Many specialists comprise the team:

- Teacher(s)
- TVI
- EI Specialists
- PTs
- OTs
- SLPs
- Doctor(s)

UNDERSTANDING CVI enhances the team's ability to help a baby increase vision development and learning

HELPING THE BABY

Environments Impact a Baby's Learning

- Home
- Professional space
- Group setting

Babies' Needs

What do babies need to enhance learning?

- Feel safe
- Feel well
- Be comfortable
- Be interested
- Find relevance
- Not be confused

Babies' learning needs differ from older children's needs and abilities

Baby's Readiness

- Introduction-comfort/safety
- Massage-alerting
- Movement-brain warmup
- Interest/fun
- "Wanna"-motivation

Intervention Readiness Chart

**Information for
professionals and parents to
enhance readiness to work
on interventions**

Readiness Areas

- Personal Readiness
- Physical Readiness
- Environmental Readiness
- Intervention Planning and Preparation

Personal Readiness

Baby

- can be calmed
- is comfortable
- is calm in specific surroundings
- tolerates touching
- tolerates interventions from slightly familiar people

Physical Readiness

- Participates in prescribed massage and movement activities
- Wears prescribed lenses
- Uses appropriate support devices
- Uses vision enhancing devices

Environment Readiness

- Area noise-clutter adjusted
- Area light adjusted
- Area distractions adjusted

Intervention Planning and Preparation

- Interventions are based on background information
- Items are gathered and environment set ahead
- Interventions are planned to engage attention and interest

Types of interventions

- Exercises
- Activities
- Routines
- Controlled Learning Experiences
- Life Experiences

Interventions cont.

- Activities are planned to expand vision skills systematically
- Activities are part of a framework with beginning, middle and end cues

Highly Visually Motivating Targets

- Lights
- Movements
- Color
- Faces
- Contours
- Contrasts
- Reflective
- Projectiles
- Geometrics
- Combined stimuli

Enhancing Visual Abilities

The Early Vision Development Guide

A planning tool for Parents and
interventionists

Identifies specific interventions
to enhance development of early
steps of vision development
and enhance general development

Strategies

- PLAY...fun...meaningful
- Embed
- Consider the “pay check”
- Repetition

Ideas and Activities

Check out Appendix A for
intervention suggestions
and activities

Guide Areas

1. Visual Alerting
2. Visual Engagement
3. Visual Integration

Visual Alerting

- Keeps eyes open when awake
- Tolerates visual stimulation
- Alerts to light
- Briefly alerts to light at near in a dark room
- Briefly alerts to light at near in low room light
- Alerts to light at near in a room with normal light
- Alerts to a shiny or illuminate target at near
- Alerts to movement at near and mid-range
- Shows preference for specific colors (Note the colors)

Visual Alerting continued

- Alerts to visually motivating targets at near
- Alerts to visually motivating targets at midrange and beyond
- Moves position to improve fixation or view of target
- Maintains fixation while reaching toward a visually motivating target
- Visually locates and moves to desired or named target at midrange or far
- Imitates or responds to gestures, signs, or smiles viewed from increasing distances
- Uses visual interest during therapy sessions

Visual Engagement

- Holds brief fixation on stationary, favorite, lighted objects at near
- Holds brief eye contact or regards face of familiar person
- Fixates on an increasing number of visually motivating targets at near and midrange
- Locates visually motivating targets that are at near and at eye level
- Adjusts fixation when desired target is slightly moved from view
- Shifts gaze between two visually motivating targets at near or midrange
- Spontaneously fixates on many visually motivating targets at near or midrange

Engagement continued

- Fixates with less visual delay on visually motivating targets at near and midrange
- Gazes toward and maintains attention on targets at midrange and at far
- Fixates to indicate intention or a desired target
- Looks toward a named target or person at near or midrange
- Looks toward dropped visually motivating targets
- Fixates on a desired visually motivating target out of many at near
- Fixates on named photo or picture of a known object or familiar person

Visual Integration

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