

## Neuro Visual Assessment

Chief complaints frequently reported:

- Patient often does not perform to their potential
- Patient frequently makes reversal errors in reading or writing
- Patient often loses their place when reading
- Patient is unable to finish work within allotted time
- Patient shows signs of distractibility or a short attention span
- Patient has difficulty copying from the blackboard

### Signs and symptoms related to Visual-Efficiency deficits

#### Assessment

<b>Ocular Motor Dysfunction</b>	<i>Never</i>	<i>Rarely</i>	<i>Frequently</i>	<i>Always</i>
Struggle to smoothly follow moving objects with eyes				
Eyes feel tired or strained after reading				
Often skip words or reverse letters while reading				
Lose your place while reading				
Turn your head excessively while reading				
Omit words or skip lines while reading				
Find it hard to understand or remember what you read				

<b>Accommodative Dysfunction</b>	<i>Never</i>	<i>Rarely</i>	<i>Frequently</i>	<i>Always</i>
Experience visual blur or fluctuation in vision when looking at things up close				
Eye hurt, burn, or feel tired when reading				
Headaches while reading or doing close up work				
Eyes feel fatigued after reading for a while				
Rub, blink or tear up excessively while reading				
Intermittent blur of distance vision after doing near point activities				

<b>Binocular Dysfunction/Vergence Deficiencies</b>	<i>Never</i>	<i>Rarely</i>	<i>Frequently</i>	<i>Always</i>
Intermittent double vision				
Re-reading the same line of words				
Close or cover one eye while reading				
Difficulty aligning columns of numbers				
Letters appear to float, jump off the page, or move around while reading				
Headaches or ocular fatigue with near work				
Head tilt or turn when reading or focusing on tasks				
Double vision				
Struggle with judging depth or spatial judgements				
Eyes feel watery or tired after reading				

## Signs and symptoms related to Vision processing deficits

Vision-vestibular integration problems, visual-motor integration problems, spatial coordination dysfunction, disturbance of body image, difficulty sustaining visual attention.

### Assessment

#### **Bilateral Integration in Vision Information Processing**

*Never    Rarely    Frequently    Always*

Lack of coordination and balance				
Difficulty sitting or standing still				
Appears clumsy, frequently falling or bumping into things				
Poor athletic performance				

#### **Laterality and Direction**

*Never    Rarely    Frequently    Always*

Difficulty learning right from left				
Reverse letters and words or read from right to left				
Confuse directions				

#### **Visual Discrimination**

*Never    Rarely    Frequently    Always*

Confuse likeness and differences, mistaking words with similar beginnings and endings				
Struggle with alphabet recognition				
Overgeneralize when classifying objects				

#### **Visual Figure-Ground**

*Never    Rarely    Frequently    Always*

Difficulty finishing work due to trouble discriminating relevant vs irrelevant information				
Works slowly compared to peers				
Perseverate on details of current work				

#### **Visual Closure**

*Never    Rarely    Frequently    Always*

Ignore details in visual tasks, leading to incomplete work				
Poor comprehension during visual tasks				

#### **Visual Memory and Sequencing**

*Never    Rarely    Frequently    Always*

Poor spelling skills				
Struggle with math concepts				
Difficulty visualizing what is read				
Whisper to themselves during reading				
Poor recall of visually presented tasks				

**Visual Motor Integration***Never Rarely Frequently Always*

Sloppy writing and drawing skills				
Struggle with spacing and staying on lines when writing				
Responds orally but have difficulty producing answers on paper				
Difficulty completing written work in the allotted time				

**Auditory-Visual Integration***Never Rarely Frequently Always*

Poor spelling ability				
Struggle to read phonetically				
Difficulty relating symbols to their sounds				

**Gaze Stabilization Dysfunction****Assessment****Visual and Vestibular Issues***Never Rarely Frequently Always*

Involuntary eye movements when trying to keep your eyes steady				
Experience dizziness with motion in the background				
Stiff neck or experience frequent headaches				
Manual therapy provides temporary relief from headache pain				
Trouble with reading				
Hard time driving in busy traffic				
Startle more easily				

**Optokinetic Nystagmus (OKN) Dysfunction***Never Rarely Frequently Always*

Trouble functioning in busy environments				
Experience anxiety in crowds				
Feel slight inner anxiety or shakiness for no apparent reason				
Trouble driving fast with other cars around you				
Experience dizziness that comes for no apparent reason				
Feel fatigued while scrolling on the computer				

**Pursuits and Saccadic Dysfunction***Never Rarely Frequently Always*

Have trouble following moving objects with your eyes				
Develop tightness in your neck for no apparent reason with visual demands				
Feel like you miss targets when moving your eyes quickly				
Tire easily when reading or driving				
Feel more clumsy than usual				
Difficulty knowing where you are in space				
Feel slower with cognition or motor movements				

**Vestibular Ocular Dysfunction***Never Rarely Frequently Always*

Feel dizzy when moving your head back and forth				
Trouble looking over your shoulder while driving				
Trouble reading signs when walking fast				
Feel dizzy when moving your head up and down				
Issues turning left and right quickly				
Experience motion sickness more easily than usual				

**Cervical Spine Integration***Never Rarely Frequently Always*

Traumatic whiplash incident <i>(yes or no)</i>				
Pain in your neck refer into your head or arms				
Neck stiff and tight				
Feel foggy or dizzy when you move your neck				
Experience improvements in pain with manual therapies				
Tightness or pain in your neck when using your eyes				
Improvements in visual symptoms with manual therapy				

**Frontal Lobe Dysfunction***Never Rarely Frequently Always*

Difficulty planning, organizing, or completing tasks				
Experience problems with attention and concentration				
Changes in your ability to make decisions or solve problems				
Trouble controlling impulses or exhibit socially inappropriate behavior				
Hard to initiate activities or feel a lack of motivation				
Experience changes in your ability to regulate emotions or exhibit mood swings				

**Parietal Lobe Dysfunction***Never Rarely Frequently Always*

	<i>Never</i>	<i>Rarely</i>	<i>Frequently</i>	<i>Always</i>
Difficulty distinguishing left from right				
Problems with spatial awareness, such as bumping into objects or getting lost easily				
Challenging to perform tasks that require hand-eye coordination				
Trouble recognizing objects by touch (tactile agnosia)				
Difficulty with reading, writing, or math (acalculia)				
Issues with drawing or constructing objects (constructional apraxia)				

**Temporal Lobe Dysfunction***Never Rarely Frequently Always*

	<i>Never</i>	<i>Rarely</i>	<i>Frequently</i>	<i>Always</i>
Difficulty recognizing faces (prosopagnosia)				
Problems with memory, such as trouble recalling recent events				
Difficulty understanding spoken language (receptive aphasia)				
Changes in your ability to identify and interpret sounds				
Unusual or heightened sensitivity to sounds				
Trouble finding the right words when speaking (expressive aphasia)				

**Cerebellar Dysfunction***Never Rarely Frequently Always*

	<i>Never</i>	<i>Rarely</i>	<i>Frequently</i>	<i>Always</i>
Change in balance with your eyes closed				
Feel uncoordinated when walking				
Notice a tremor when reaching for objects				
Injured your back or neck when lifting objects				
Often bump into objects or trip on the stairs				
Changes in speech, such as slurring				
Motion sickness more easily				

**Basal Ganglionic Dysfunction***Never Rarely Frequently Always*

	<i>Never</i>	<i>Rarely</i>	<i>Frequently</i>	<i>Always</i>
Dry eyes				
Decreased movement speed				
Notice a slight tremor when your hand is at rest				
Tightness in your shoulders and chest muscles				
Notice a delay in cognitive processing speed				
Increased amount of saliva in your mouth				
Unexplained anxiety and/or trouble with sleep patterns				
Issues digesting food				

**Brainstem Dysfunction***Never Rarely Frequently Always*

	<i>Never</i>	<i>Rarely</i>	<i>Frequently</i>	<i>Always</i>
Dizziness or balance issues				
Difficulty swallowing or frequent choking				
Notice changes in your speech, such as slurring or hoarseness				
Abnormal eye movements or trouble focusing your eyes				
Unexplained changes in heart rate or breathing patterns				
Weakness or numbness in your face or limbs				

**Insular Dysfunction***Never Rarely Frequently Always*

	<i>Never</i>	<i>Rarely</i>	<i>Frequently</i>	<i>Always</i>
Difficulties with emotional regulation or notice sudden mood swings				
Altered sense of taste or smell				
Challenging to perceive internal bodily states, such as hunger, thirst, or pain				
Trouble recognizing and interpreting your own emotions or the emotions of others				
Unexplained anxiety or panic attacks				
Change in your ability to maintain attention or focus on tasks				