

> VISION REHABILITATION NEWS



FOUNDATIONAL VISION SKILLS

As developmental optometrists, we diagnose and treat the foundational skills necessary for visual perceptual development; in addition to treating binocular vision disorders, visual motor deficits and visual information processing disorders.

As you may know, we also coordinate care with educational psychologists as well as OTRs, PTs, MDs, ODs, and other allied health professionals. We work with adults as well as children. It might interest you to know that we rarely see a child who has visual perceptual and visual motor delays who doesn't also have a binocular vision disorder. Once the binocular vision disorder is treated, we often see dramatic changes in visual perceptual skills and especially visual motor skills.

In the book *Occupational Therapy for Children* by Jane Case-Smith, Jane Clifford O'Brien, the authors reference the hierarchy of visual-perceptual skills development by Mary Warren, MS, OTR (we assume you are familiar with this reference, but thought you might appreciate a reminder):



Primary visual skills form the foundation of all visual functions:

Oculomotor control provides efficient eye movements that ensure that the scan path is accomplished.

Visual fields register the complete visual scene.

Visual acuity ensures that the visual information sent to the CNS is accurate.

Working with visual perception before evaluating foundational vision skills in children who have binocular vision disorders can waste precious time and cause frustration for parents as well as the patient. It can also result in patients having the false perception that they already did visual perceptual training and that it won't help. Once the foundational skills are rehabilitated, working on visual perceptual skills is much more effective and positive results are obtained faster.

When you find children that continue to struggle with comprehension, reading and learning, it is appropriate to refer to our office for a developmental vision evaluation. Please email us if you would like a referral form.



ARE YOU LOOKING FOR AN IN-SERVICE PROGRAM?

BE SURE TO TAKE ADVANTAGE OF OUR FREE IN-SERVICE PROGRAMS:

- Double Vision, Field Neglect, Dizziness and Motion Sickness: The Visual Connection
- Post Trauma Vision Syndrome: A Co-Management Approach
- Vision Development Problems in the Special Needs Population

These workshops are available on a limited basis, as our doctors' schedules allow. For more details or to schedule your in-service program, please call our office and ask for Lindsay or email: lindsay@sdvisions.com

OCULOMOTOR DYSFUNCTIONS COMMON IN MTBI PATIENTS

Visual sequelae post-concussion or mTBI, typically includes eye movement disorders (oculomotor dysfunctions). According to a handout from The Vision Excellence Center at Walter Reed National Military Medical Center:



Oculomotor dysfunctions associated with TBI may affect many areas of daily living including reading, visual learning and ability to concentrate.

Vision Therapy is an accepted treatment of choice for the most common TBI-related visual dysfunctions: convergence insufficiency and accommodative dysfunction, with a success rate of 74-95%.

Oculomotor dysfunctions occur in neurotypical individuals, as well as those with mTBI, and TBI. In many cases, depending on how long the patient has struggled with the symptoms, the patient may present as depressed since no one has been able to help them. However, we have found that once the underlying problem is identified, it restores hope. And, once the problem is resolved, their ability to function is greatly increased. In many cases, they can get back to work, or school.

Typical treatment can be as simple as special therapeutic lenses often including prism and/or more involved with in-office Neuro-Optometric Vision Rehabilitation depending on the depth of the problem.

The most common symptoms or signs of Oculomotor Dysfunction include difficulty with:

- General reading skills
- Reading speed and comprehension
- Coordination or clumsiness
- Sports
- Attention and concentration
- Disorientation
- Motion sickness
- Double Vision
- Balance and movement, especially in visually busy environments such as malls, grocery stores, etc.



HOW TO QUICKLY DETERMINE IF A VISION DISORDER IS IMPACTING PERFORMANCE

We recommend using the Vision Symptom Survey, which is an excellent tool to identify patients who are struggling with visual sequelae post-concussion. If the patient has any peripheral vision symptoms that are occurring often or always (3 or 4), it can be very distressing for the patient and an immediate referral is indicated. However, overall, a score of 32 or higher indicates the need for a Neuro-Optometric Vision Evaluation. To get your free copy, please email: lindsay@sdvisions.com