

> VISION REHABILITATION NEWS



PERSISTENT TRACKING PROBLEMS

visual deficits can slow overall rehabilitation process



Recently, we did a review of patients who were referred for persistent tracking problems by their OTs and we thought you might be interested in what we found.

In addition to having persistent tracking disorders, the patients also had a variety of other visual deficits contributing to their challenges, including:

- **Poor Convergence (insufficiency)**
 - **Convergence Excess**
 - **Spasm of Accommodation**
 - **Strabismus**
 - **Amblyopia**
 - **Suppression of Binocular Vision**
- Oculomotor Dysfunctions broken down by different eye movement skills:**
- *Saccadic Dysfunction*
 - *Pursuit Dysfunction*
 - *Fixation Instability*

When any of the above visual deficits are present, they can slow down the overall rehabilitation process. Once these are resolved, it can make your job much easier.

We realize that as Developmental Optometrists, the way we view vision may differ from what other health care providers may have been taught.

In Optometry, we are taught the following foundational sequence:

1. Visual acuity & eye health
2. Accommodation
3. Oculomotor
4. Vergence - convergence/divergence
5. Fusion-Binocularity
6. Visual Information Processing

Often, we find that an assessment of the symptoms is a good way to identify potential visual disorders. While there may be some overlap between the symptoms of a visual disorder and a condition which requires your services, the key is: **do the symptoms persist despite your best interventions?**

Research has shown that the incidence of eye coordination and eye movement disorders are very common after a head injury, as well as in the special needs population. The actual symptoms can really vary and difficulty with reading is one of the more common signs, as well as difficulties with balance and movement. If you would like a more in-depth symptom checklist to use as a quick reference guide for the visual sequelae that can occur, please email our Patient Care Coordinator, Lindsay at: lindsay@sdvisions.com.

INSIGHT TO LIGHT SENSITIVITY

As you know, the majority of mTBI patients struggle with light sensitivity. We ran across an article we thought you might find of interest which discusses this in greater detail.



The article was published in the Concussion Journal by Future Medicine (located in the UK) that explains why - the pupillary light reflex was found to be "significantly delayed, slowed and reduced, but symmetrical in nature." What that means is, more light is going into the eyes and, hence, brain than an individual would normally be able to process/see at one time. So, in addition to any processing deficits that are secondary to the mTBI, now the patient is trying to absorb more light than can be processed by a normal or non-mTBI person. The article is available on pubmed.com: Understanding the effects of mild traumatic brain injury on the pupillary light reflex.

Something we have found over the years is, by treating the visual system we are able to return the patient to a normal pupillary response, which eliminates the light sensitivity. This often makes a big improvement in the overall rehabilitation process.

Neuro-Optometric therapies can make a significant difference, especially when an underlying focusing, ocular alignment, visual acuity, or visual processing problem is suspected in addition to the VOR problem caused by the vestibular disorder. Sometimes, prescription glasses with prism or tints can help; other times the patients need a program of Neuro-Optometric Rehabilitation and/or Optometric Phototherapy to fully resolve the vision problem.

HOW YOU CAN HELP!

For more information or a symptom checklist to assist in identifying potential Binocular Vision disorders, please email our Patient Care Coordinator, Lindsay at: lindsay@sdvisions.com

TAKE ADVANTAGE OF OUR FREE IN-SERVICE PROGRAMS:



Are you looking for an in-service program?

(1)

Double Vision, Field Neglect, Dizziness and Motion Sickness:

The Visual Connection

(2)

Post Trauma Vision Syndrome:
A Co-Management Approach

(3)

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