

> VISION REHABILITATION NEWS



BRAIN INJURY AND VISION DISORDERS

optometry + vision science journal

According to a retrospective study of 218 concussion patient records, 82% had an oculomotor (eye movement) disorder. Optometric vision therapy is typically the best treatment for eye coordination and eye movement disorders. This study also found: *"Vision therapy had a successful or improved outcome in the vast majority of cases that completed treatment."*

Another study in this journal addresses patching for diplopia in brain injury patients. While patching often seems like a good approach when the patient complains of double vision, this study actually found that patching is contraindicated. Specifically:

"Patching the left eye has been shown to worsen spatial judgments in some brain-injured patients with left neglect by inhibiting the right superior colliculus further impairing contralateral leftward orienting."

This article discusses additional approaches to achieving the same effect as patching without the physical patch. However, prior to patching, it is important to ensure that the patient has received a thorough neuro-optometric

vision evaluation of all eye movement (oculomotor), eye coordination (eye teaming) and eye focusing skills (accommodation), when designing the treatment plan to ensure the patient's comfort and success.

This is an area that we have specialized in for more than 15 years. Feel free to call us with questions on your specific cases or use our enclosed referral form for any symptomatic patients.



Dr. Ashley Gentrup, Dr. Angela Gulbranson and Dr. Jennifer Hupke

HOW TO DETERMINE IF A VISION DISORDER IS IMPACTING PERFORMANCE

We recommend using the enclosed Brain Injury 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. Overall, a score of 32 or higher indicates the need for a neuro-optometric vision evaluation.

Do you know the signs of Post Trauma Vision Syndrome? Please email our office for digital copies of the Brain Injury Symptom Survey or referral form: visions@sdvisions.com

VISION & DYSLEXIA

A study from Harvard Medical School, published in JAMA Ophthalmology, "*Frequency of Visual Deficits in Children with Developmental Dyslexia*," found a correlation between developmental dyslexia and binocular vision disorders.

In the conclusion it states: "*These findings suggest that deficits in visual function are far more prevalent in school-aged children with Developmental Dyslexia than in Typically Developed readers...*"

In our clinical experience, we have seen a number of children who had vision problems contributing to their reading difficulties. Once the vision problems were taken care of, these children were able to read and responded faster to tutoring and other educational interventions.

We have also seen a number of children who had binocular vision problems that were mistakenly thought to be dyslexic symptoms. Once the vision problems were corrected, the dyslexia symptoms disappeared and they were able to read and learn.

Eye coordination and eye movement disorders often make the text appear to move around while the child is trying to read. When this occurs, it requires a tremendous amount of concentration just to see the words, and very little concentration is left to remember what they read.

When you find children who continue to struggle with comprehension, reading and learning, it is appropriate to refer to our office for a developmental vision evaluation.



ARE YOU PLANNING?



**be sure to take advantage
of our free In-Service Programs:**

*Learning-Related Vision Problems:
When Smart Kids Struggle*

*Post Trauma Vision Problems:
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. To schedule your in-service program, please call our office and ask for Lindsay or email: lindsay@sdvisions.com.

"VISION DIAGNOSES ARE COMMON AFTER CONCUSSION IN ADOLESCENTS"

An article published in Clinical Pediatrics shows a direct link between academic problems resulting from concussion and binocular vision disorders. "*Vision Diagnoses Are Common After Concussion in Adolescents*" is a collaboration between two developmental optometrists and four concussion specialists.

According to the results: "Overall, 69% had one or more of the following vision diagnoses: accommodative disorders (51%), convergence insufficiency (49%) and saccadic dysfunction (29%). In all, 46% of patients had more than one vision diagnosis."

All of these visual deficits are very correctable. Depending on where the patient is in the recovery process, treatment can include lenses, prisms and a full program of optometric vision therapy.

The first step is a neuro-optometric vision evaluation in our office where one of our doctors will determine the best therapeutic options.