

Functional & Binocular Vision

Newsletter of the Vision & Learning Center of Northcentral PA

Research & Resources

Vision Therapy for Basic Exotropia in Adults: 2 Case Studies--“Conflicting opinions still exist regarding prescribing any treatment for adult strabismus, including surgical realignment and optometric vision therapy...Adult patients with moderate-size intermittent exotropia of the basic type who presented with asthenopia, headaches, and/or diplopia...Both patients became phoric for all distances...Optometric VT eliminated the patients' symptoms of asthenopia and diplopia without the need for surgery.” Peddle A, Han E, Steiner A, *Optometry* 2011;82:467-474.

Accommodation in Mild Traumatic Brain Injury--“Accommodative dysfunction may be especially prevalent in the mTBI population...Symptoms of accommodative deficit, such as blur, intermittent diplopia, and near work asthenopia, could negatively affect reading ability (a primary problem in mTBI)...Fortunately, these accommodative dysfunctions can be successfully remediated...with relatively simple optometric vision therapy paradigms...and/or the prescription of low-powered plus lenses for near work.” Green W, Ciuffreda KJ, Thiagarajan P, Szymanowicz D, Ludlam DP, Kapoor N, *Journal of Rehabilitative Research and Development* 2010;47:183-210.

A Case of Convergence Insufficiency

Avina, 9, got headaches with reading. A bright girl and an excellent student, she described her visual symptoms more vividly than many children. Most kids with CI don't mention blurry or double vision...perhaps because there is no reference point. They might skip lines or words in text, take hours to complete homework, or avoid reading. Avina, however, described how words would “break apart” and that she would “look up” or “shake her head” to regain proper vision. She was referred by Dr. G William Orren III for convergence insufficiency with symptoms of “headaches and words that overlap.” Avina wore glasses for mild myopia and had no health problems.

INITIAL				FINAL		
cover	D	ortho		cover	D	ortho
	N	6XP			N	6XP
NPC		4”/6” receding	(break/recover)	NPC		2”/2.5”
NBI		-1/10/8	(prism bar)	NBI		16/18/10
NBO		8/10/8	(prism bar)	NBO		30/45/45
BAF		0 cpm	(binoc +/-2.00)	BAF		8 cpm
VF		5 cpm	(15 BO, 3 BI)	VF		15 cpm
amp		3.75D	(minus lens)	amp		>7.5D
		4.35D				>7.5D
NRA/PRA		+2.25/-0.75		NRA/PRA		+2.50/-2.50

Headaches and diplopia resolved during the course of vision therapy. Avina's comments are on the back of this sheet.

History Taking Tips for the School-Age Child

“A comprehensive history is crucial to the understanding of the child's problem.” --Scheiman & Wick, the standard PCO textbook *Clinical Management of Binocular Vision*, 3rd Ed. When time is limited, what questions are helpful in identifying vision problems that may impact schoolwork?

► How is Danny doing in reading? Is he on-level, below-level, or above-level?

(If the second part of the question is omitted, some parents may say “OK” and fail to mention the child's Title I reading support and long-standing struggle with reading. The question could be presented in many ways, of course.)

► Are there any headaches? (in the afternoon, with reading, around the forehead?)

► Does Danny lean unusually close to books? Squint? Rub eyes? Blink excessively?

► Visual Symptoms Associated with Reading—Scheiman & Wick:

Sleepiness with reading; omits small words; frequent loss of place; omits whole lines of text or rereads same line; uses finger to maintain place; avoidance of reading; movement of print; difficulty concentrating on reading material

The 15-question Convergence Insufficiency Symptom Survey is a useful tool with a journal reference at the bottom and the AOA's endorsement. Get the pdf at <http://www.aoa.org/documents/PLRG-CI-Card.pdf>

Flora P.
patient

SUCCESS STORY

What changes have you noticed since beginning vision therapy? Use reverse if needed.

(Amina)
Her headaches are gone. She doesn't have any double vision. As a result, she's able to enjoy reading (her favorite hobby) for longer periods without headaches.

Have your goals been met? yes

Please comment:

Would you recommend this service to others? yes

Comments: Dr. Myers is really good at what he is doing. The staff is fantastic. Amina is always looking forward to see them.

May we give your name to prospective patients? Some patients may wish to speak with someone who has had similar experiences/conditions. Yes No
If yes, the best time to call me is between 10 am and 7 pm at (576) 374-7733.

What changes have you noticed since beginning vision therapy?

I am able to read for a longer time, I don't get headaches anymore, no more double vision, and I'm able to focus a lot easier.

Have your goals been met? yes!!

Please comment: My goal was to

not see double vision, and to not get really bad headaches by the end of therapy.

Would you recommend this service to others? yes

Comments: The therapist there are funny, very kind, and are always ready to work with you. You will always remember them!