

Functional & Binocular Vision

Newsletter of the Vision & Learning Center of Northcentral PA

Research & Resources

Pediatrician Becomes Vision Therapy Believer (online blog) Dr. Jennings, pediatrician: “We had taken Zach to see a specialist for ADHD in NY...(who) wondered if vision therapy might be helpful to Zach...(then) I asked our ophthalmologist who had seen Zach since age 5 ½ for his opinion. He said that I should read the statement by the AAO and the AAP that came out in 2009. He did not think (VT) would be helpful...(Later) at Zach’s developmental vision appointment, first I was told (by the VT optometrist) that he needed bifocals. I was surprised by this, as nobody had ever checked his near vision...When the bifocals arrived, Zach put them on and looked at a book. 'Mama! This book has LETTERS in it!' he yelled...'They used to look like hairy gray blobs'...I took Zach back to his ophthalmologist and discussed vision therapy with him. His response was, 'I really haven't been trained in this.'” According to Dr. Jennings, “the specific vision skills needed for reading—eye teaming, saccadic movements, pursuits, convergence in the same place—these were never mentioned during any of my training in medical school or residency.” Dr. Jennings has become an advocate for VT. Read her story at <http://wittmanvision.com/category/success-stories>.

Treatment of Accommodative Dysfunction in Children: Results from a Random Clinical Trial

“Associated signs and symptoms are usually related to reading and other close work activities and include: blurred vision at near, intermittent blurred vision when looking up from near work, headaches, watering or burning eyes, tired eyes, loss of concentration, and avoidance of near activities...Accommodative disorders are commonly encountered in pediatric eye care practices, and the two most common accommodative disorders are accommodative insufficiency and accommodative infacility.....Vision therapy/orthoptics is effective in improving accommodative amplitude and facility in school-age children with symptomatic CI and accommodative dysfunction.” Scheiman M and the CITT Study Group, *Optom Vis Sci*, 2011 Nov. 88(11): 1343-1352.

A Case of Accommodative Insufficiency

Katarina, age 9, got headaches with reading and leaned unusually close to books. A local optometrist found no refractive error but referred Katarina to an ophthalmologist for further testing. The ophthalmological practice documented healthy tissues and concurred that glasses were not indicated. The headaches in school continued, Katarina avoided reading whenever she could, and the school was considering testing for learning disabilities. When we saw Katarina, she showed 20/20 distance eyesight with no refractive error but she was barely able to see 20/40 equivalent print on a near card! She described how words got “dizzy.” We prescribed +1.00 reading glasses for accommodative insufficiency. At follow-up, headaches were reduced and the family reported less resistance to homework. Katarina then completed vision therapy to normalize visual function. The family credits the initial optometrist with first identifying “vision” as the source of Katarina’s academic difficulties.

INITIAL			FINAL		
cyclo		+0.25sph, +0.25sph	subj		plano, plano
cover	D	ortho	cover	D	ortho
	N	6XP		N	6XP
NPC		2”/3”	NPC		2”/3”
NBI		-10/6	NBI		-14/10
NBO		-30/20	NBO		45/>45/45
BAF		0 cpm	BAF		8 cpm
amp		<2.5D, <2.5D	amp		>7.5D, >7.5D
		(break/recover)			
		(prism bar)			
		(prism bar)			
		(binoc +/-2.00)			
		(minus lens)			

Accommodative insufficiency can be easy to miss because there may be no obvious signs, such as significant phoria or receded convergence. Not all children with accommodative dysfunction have headaches. Loss of place in text or avoidance of reading may be more common. History and near point tests are key. Reading glasses or bifocals can effectively reduce symptoms. Comments from Katarina and her family are on the back.

History Taking Tips for Accommodative Dysfunction

- ▷ *How is Danny doing in reading?* Is he on-level, below-level, or above-level?
- ▷ *Are there any headaches?* In the afternoon, with reading, around the forehead?
- ▷ *Does Danny lean unusually close to books?* Squint? Rub eyes? Blink excessively?
- ▷ *Does he skip words or lines when reading?* Need to use a finger to keep place?

What changes have you noticed since beginning vision therapy?

I can read better. I'm less shy.
I have no more headaches.
no more blurriness.

What changes have you noticed since beginning vision therapy?

Sees better, words aren't blurry, and doesn't skip around on the page.

Have your goals been met? yes

Please comment: Can read better & is catching up with the other kids in class. Sits down and does her homework without being told numerous times, and enjoys reading.

Would you recommend this service to others? yes

Comments: Katarina is reading out loud in class now. Her confidence is growing every day. Teachers have commented on how well she is doing.

"Katarina received the President's award for Educational Achievement in recognition of Outstanding Academic Achievement for fourth grade. Now in fifth grade, Katarina has been on the distinguished honor roll with straight A's every marking period." (email 4/18/13)

Katarina's mother and father have expressed an interest in talking to families or professionals about her experience. She can be reached at (570) 353-2711.