Article ▸ Using Therapeutic Prism Lenses in Children with Sensory Processing Disorder: A Case Study

Poonam Nathu, OD, Irvine, California

ABSTRACT

Background: Sensory processing disorder (SPD), also known as sensory integration dysfunction, is a term that refers to the manner in which the nervous system processes information from the senses and responds via motor and behavioral outputs. Many daily tasks, such as eating, reading a book, or physical activities, require sensory integration processing. In order to assist with the communication of the sensory systems, therapeutic lenses can be used, allowing more accurate and efficient information processing.

Case Report: An eight-year-old white male diagnosed with SPD, along with attention deficit hyperactivity disorder (ADHD), mood disorder, and separation anxiety, presented for an evaluation. The patient had presented with visual complaints and symptoms during deskwork. The patient was treated with 0.75Δ base in OU subsequent to indicators in our evaluation.

Conclusion: After two months of wearing base in prism, the patient showed significant improvement in behavior, visual skills, and posture. This case underscores the importance of therapeutic prism and its effect on the involvement of SPD.

Keywords: computerized dynamic posturography, sensory processing disorder, textual aliasing, therapeutic prisms, visual evoked potential, visual spatial disorientation

Introduction

Sensory Processing Disorder (SPD), formerly known as sensory integration dysfunction, is a condition when sensory signals are disorganized during processing, resulting in altered physical and behavioral responses.[1] SPD has been described in The Out of Sync Child as a "traffic jam" that decreases efficiency and, at times, the ability for certain parts of the brain to process the sensory information that is needed to perform daily tasks.[2] When such a situation is experienced, motor clumsiness, behavioral problems, anxiety, depression, or difficulty in school can be experienced if the disorder is not treated effectively.[3]

SPD is broken down into categories and subtypes. It is the umbrella term encompassing three main categories: sensory modulation disorder, sensory discrimination disorder, and sensory-based motor disorder, along with their subtypes.[2] There are different degrees of SPD. Some people are affected in only one sense (just vision or just movement), but other individuals experience the disorganization with multiple sensory inputs. There are some people that may over-respond to sensory, visual, or sound stimulation, where it may be unbearable; on the other hand, others may be under-responders and show minimal to no reaction to the sensory stimulation. It has been documented that children with SPD are often misdiagnosed and improperly medicated for ADHD by physicians due to lack of awareness of sensory issues.[2]

Many children with SPD have difficulties with learning because they have challenges using sensory information to plan and to carry out actions that need to be done. Kranowitz categorizes learning in three groups: adaptive behavior, motor learning, and academic learning.[2] Adaptive behavior is the ability to change behavior to meet different circumstances and expectations. Motor learning is the ability to develop complex movement skills after the simpler ones are learned. The last style of learning is academic learning, which is necessary to obtain conceptual skills needed for applied learning. Since any approach to management is often guided by the cause, organization of sensory processing is necessary for this population to adapt during their daily lives.[2]

The brain processes information using the parvocellular and magnocellular systems. The parvocellular system, referred to as the "what" system, and the magnocellular system, or the "where" system, are responsible for tracking objects in space and spatial visual attention.[4] Patients with visual spatial disorientation tend to have a decrease in the magnocellular pathway, which in turn decreases the visual attention when performing a task such as reading and makes it difficult for an individual to maintain performance over time.[5] A therapeutic prism spectacle prescription has been suggested to help coordinate communication in order to allow more efficient and accurate information processing within the brain. A prism redirects or shifts light within your eye rather than focusing light on your retina, which is done by a refractive lens. Yet, the therapeutic prism lenses can change the phase or timing of light by shifting the field of vision and getting information processed to the occipital lobe. This change in phase is thought to organize and to coordinate the communication between the visual, auditory, vestibular, and proprioceptive sensory systems in the brain stem.

When determining which therapeutic prism to use, the chair skills and subjective responses to the lenses are reviewed, along with the two techniques that are used:

- Computerized Dynamic Posturography (CDP) is a technique to evaluate spatial orientation and integration of three major sensory systems: visual, somato-sensory, and vestibular (Appendix 1).[3]
- Visual Evoked Potential (VEP) objectively quantifies the strength and speed of processing the visual stimulus with different magnitudes and directions of therapeutic lenses (Appendix 2).[6]

Method

During the initial evaluation, the patient is presented with 3^{Δ} base up yoked, 3^{Δ} base down yoked, and 1^{Δ} base in in both eyes. During this task, the patient is asked to look at a Binocular Dissonance Grate (Appendix 3).[7] The grates produce confusion of visual signals that cause the data to be distracting and disorienting when visually processed. This visual signal mimics lines of texts in a textbook. Therapeutic lenses are then used to create an optical effect to reduce the demand and stress on the child's visual system.[8] While looking at this grate, the patient is asked, "What can you see?" Then the therapeutic lenses are placed in front of their eyes, and again, the patient is asked to describe any changes they may have noticed. Responses can vary from the lines looking bigger or darker, more movement of the lines or less movement of the lines, ink spilling in between the lines, etc. Any subjective commentary is noted and evaluated along with the CDP and VEP results.

Case Presentation

An eight-year-old male was scheduled in our office for a comprehensive neuro-developmental evaluation. This developmental assessment was the patient's first eye exam. He had no significant ocular history. Our patient had been previously diagnosed with ADHD, mood disorder, separation anxiety disorder, and SPD. He was taking Fluoxetine, Zantac, Intuniv, Seroquel, and Trazadone for the previous diagnoses listed.

His complaints were as follows:

- Squinting to see the board at school
- Blurred vision after desk work
- Rubbing eyes during or after desk work (fatigue and eye strain after desk work)
- Holding things close
- Pulling sensation around his eyes
- Print perceived to be moving when he is reading
- Avoidance of near work
- Sensitivity to light
- Difficulty copying from the board
- Frequent loss of place
- Moving head excessively
- Skipping words and lines when reading
- Slow reading speed
- Rereads lines
- Poor comprehension
- Seeing double
- Frontal headaches
- Posture is slumped with desk work
- Difficulty using binoculars
- Very close working distance
- Car/motion sickness
- Difficulty concentrating with reading
- Loss of reading comprehension with time

Diagnostic Data

The entering visual acuity was 20/20 OD, OS, and OU. His stereoscopic vision as measured with the Randot was reduced. Evaluation of pursuits and saccades indicated below age level performance. The near point of convergence was to the nose, but with the red lens, it was receded to three feet. The red lens convergence test allows for greater sensitivity in identifying convergence insufficiency.[9] The Developmental Eye Movement test (DEM) placed our patient in the 45th percentile. His accommodative and vergence facility were significantly decreased. In order to obtain a subjective response to the therapeutic lenses, the patient was asked to look at the Binocular Dissonance Grate while looking through different magnitudes and directions of prism. The patient reported the lines looked darker and the grate was more comfortable to look at with a base in prism in front of both eyes. At the end of the evaluation, our patient was diagnosed with accommodative infacility, convergence insufficiency, saccadic dysfunction, and visual spatial disorientation. Chair skills findings are displayed in Table 1.

Management Plan

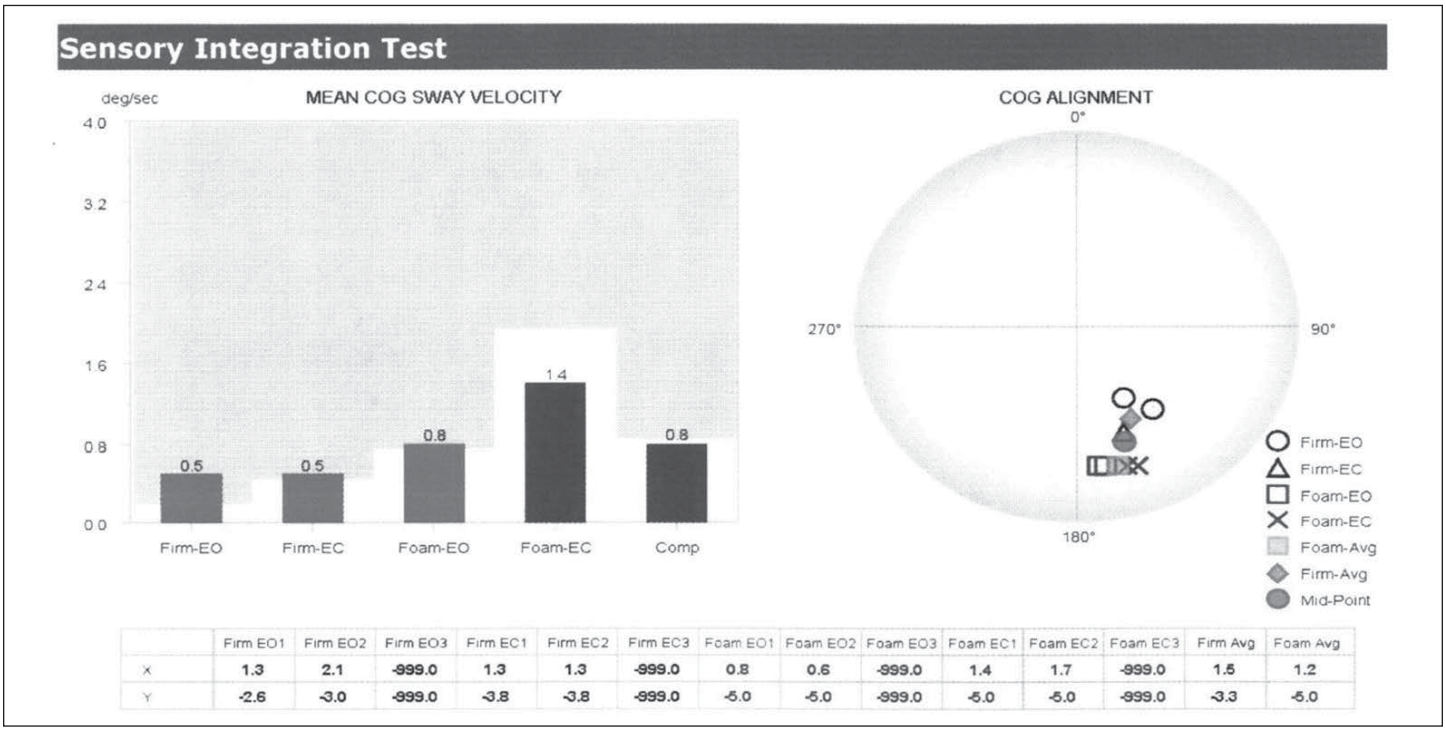
After the initial evaluation, we scheduled the patient to return for a VEP, CDP (Figure 1), and a Visagraph test (Figure 2). A Visagraph is an objective measurement of how many fixations, how many regressions, reading rate, and overall comprehension a child performs during an age-appropriate reading activity. After completion of the test series, a consultation with the parents was held to inform them about the results and treatment plan. The child was having tracking difficulties and reduced convergence and accommodative skills. The treatment, 0.75^{Δ} base in prism, was to prescribe therapeutic prism for the patient to wear full time.

Follow-Up

2 months: Several chair skills and neuro-sensory tests were rerun in order to observe any progress made. At that follow up, there was improvement in his convergence skills and vergence facility and slight improvement in accommodative facility. During the visit, a CDP (Figure 3) and Visagraph (Figure 4) were performed to determine objective progress. During the initial evaluation, our patient's Visagraph showed below grade

Table 1: Initial Chair Skill Findings & Subsequent Progress

	Initial Exam Findings	2 month follow up	3 month follow up
Stereopsis	250/3/70 sec arc	250/3/70	250/3/30
Cover Test			
Distance	Ortho	Ortho	Ortho
Near	Ortho	Ortho	Ortho
Pursuit Evaluation	3-4+ w/ Jerky movements	3-4+	4+
Saccade Evaluation	2-3+ w/ Undershooting & Jerky Movements	2-3+ Head Movement w/ Anticipation	3-4+ w/ Anticipation
Near Point of Convergence	To the nose	To the nose	To the nose
NPC w/ Red lens	3 ft break	1 ft	4 inches
Spatial Localization	Undershooting in all 9 quadrants	Normal	Normal
Visual Midline	Normal	Normal	Normal
Head and Body Position	Low muscle tone, very slowchy, Chin up	Much improved posture	Great posture, less figity, head posture normal.
Developmental Eye Movement Test			
A	24.73		
B	29.16		
C	56.68 (45 Percentile)	60.02 seconds	54.51 seconds
Accommodative Facility	OU: 6 cycles/minute	OU: 7 cycles/ min	OU: 6 cycles/ min
Vergence Facility	4 cycles/min	12 cycles	12.5 cycles
Worth 4 Dot	Flat fusion @ all distances	Flat fusino @all distances	Flat fusino @all distances
Horizontal Fusional Ranges			
Distance Lateral Phoria	Plano	Plano	Plano
Distance Vertical Phoria	Plano	Plano	Plano
Near Lateral Phoria	4 exophoria	4 exophoria	3 exophoria
Near Vertical Phoria	Plano	Plano	Plano
Near Base In	x/24/14	xx	xx
Near Base Out	x/10/0	xx	xx
Fused Cross Cylinder	+0.25	+0.50	+0.50
NRA	+3.00	+2.50	+2.50
PRA	-1.75	-2.00	-2.00
Perceptual Testing			
MVPT	47%, 8-6 age equivalent		



	Firm EO1	Firm EO2	Firm EO3	Firm EC1	Firm EC2	Firm EC3	Foam EO1	Foam EO2	Foam EO3	Foam EC1	Foam EC2	Foam EC3	Firm Avg	Foam Avg
X	1.3	2.1	-999.0	1.3	1.3	-999.0	0.8	0.6	-999.0	1.4	1.7	-999.0	1.5	1.2
Y	-2.6	-3.0	-999.0	-3.8	-3.8	-999.0	-5.0	-5.0	-999.0	-5.0	-5.0	-999.0	-3.3	-5.0

Figure 1. *Initial platform posturography*

Student: [redacted]
Class: 1st quarter 2013
Grade: 2
Examiner: Visagraph Administrator
Visagraph

11/17/14

Recording Type: 19 - Circus Clown
Level: 2
Comprehension %: 70

Reading Report 11/17/2014

Measurement	Left	Right	Grade Norm	Goal
Fixations/100 words	165	160	174	< 139
Regressions/100 words	35	23	40	< 31
Avg. Span of Recognition	0.61	0.62	0.57	> 0.72
Avg. Duration of Fixation	.38	.39	.30	< .27
Reading Rate (wpm)	97		115	> 184
Reading Rate w/o Rereads	100		-	-
Directional Attack Difficulty	21%		23%	< 22%
Grade Level Efficiency (GLE)	1.8			
Cross Correlation	83%			
Lines Found/ Countable Lines	7/7			

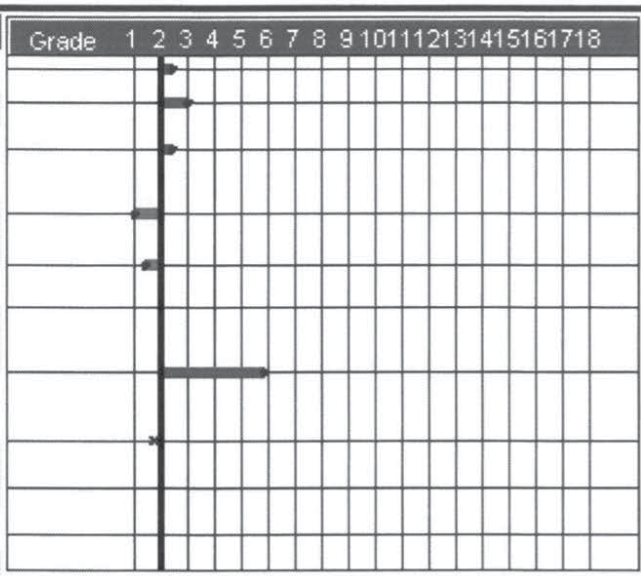
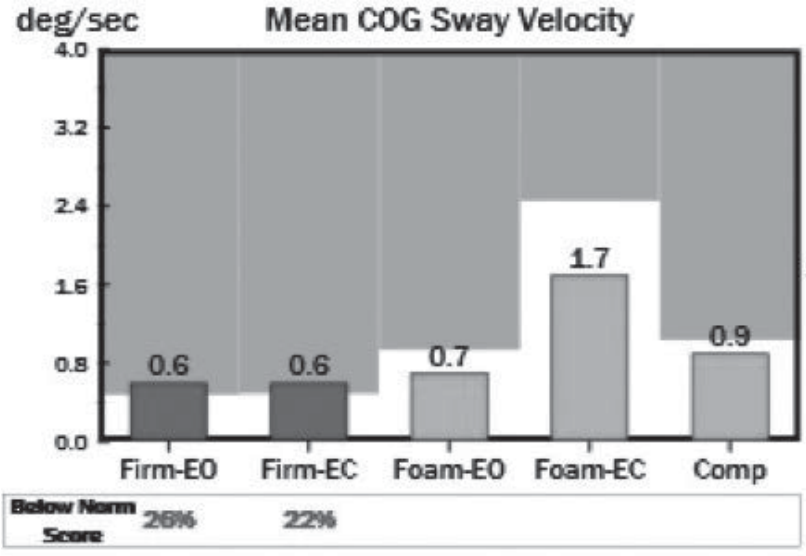


Figure 2. *Initial visagraph results*



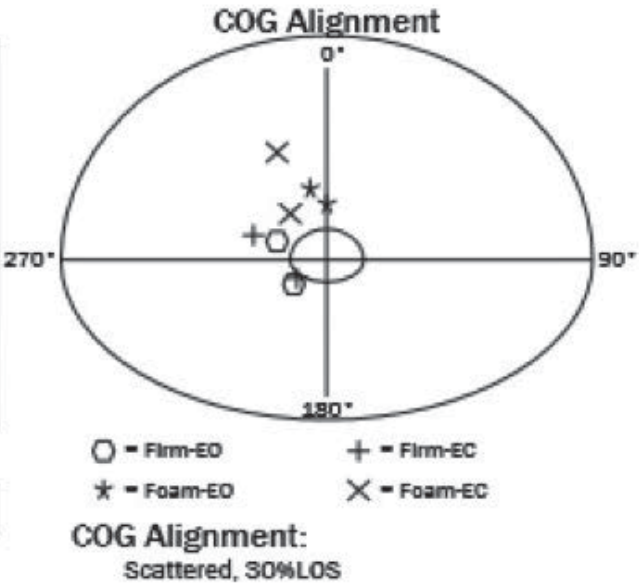


Figure 3. *Two-month follow up – CPD*

Student: [redacted]
Class: 1st quarter 2013
Grade: 2
Examiner: Visagraph Administrator
Visagraph

1/21/15

Recording Type: 17 - Television show
Level: 2
Comprehension %: 70

Reading Report 01/21/2015

Measurement	Left	Right	Grade Norm	Goal
Fixations/100 words	91	80	174	< 139
Regressions/100 words	4	0	40	< 31
Avg. Span of Recognition	1.10	1.25	0.57	> 0.72
Avg. Duration of Fixation	.20	.22	.30	< .27
Reading Rate (wpm)	333		115	> 184
Reading Rate w/o Rereads	333		-	-
Directional Attack Difficulty	4%		23%	< 22%
Grade Level Efficiency (GLE)	13.7			
Cross Correlation	94%			
Lines Found/ Countable Lines	7/7			

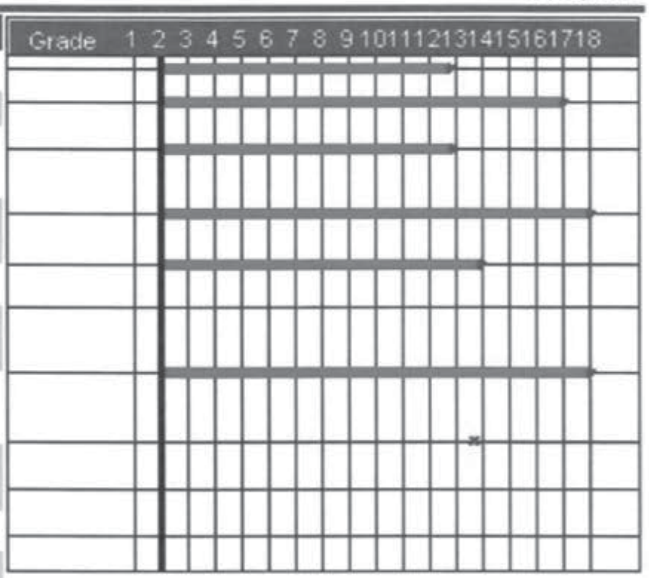
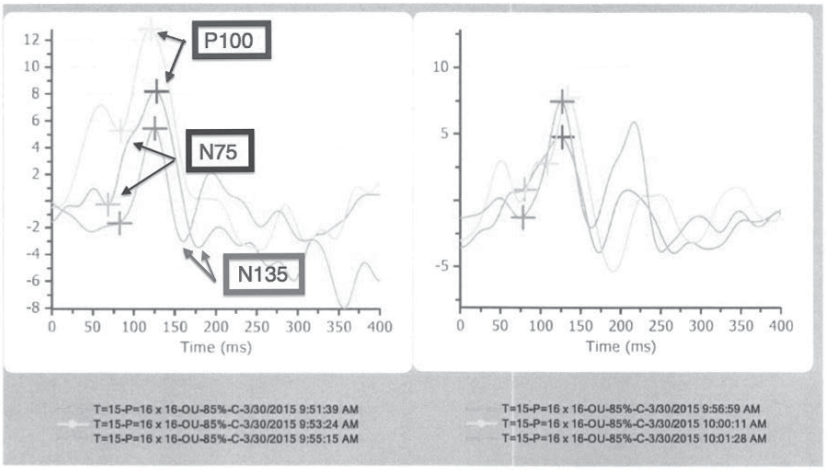


Figure 4. *Two-month follow up – Visagraph*



	T=15-P=16 x 16-OU-85%-C-3/30/2015 9:51:39 AM	T=15-P=16 x 16-OU-85%-C-3/30/2015 9:53:24 AM	T=15-P=16 x 16-OU-85%-C-3/30/2015 9:55:15 AM	T=15-P=16 x 16-OU-85%-C-3/30/2015 9:56:59 AM	T=15-P=16 x 16-OU-85%-C-3/30/2015 10:00:11 AM	T=15-P=16 x 16-OU-85%-C-3/30/2015 10:01:28 AM
Left Cursor Lat	69.2 ms	83.8 ms	82.9 ms	80.0 ms	108.2 ms	78.0 ms
Amp	-0.32 uV	5.22 uV	-1.67 uV	0.83 uV	2.75 uV	-1.29 uV
Right Cursor Lat	**127.7 ms**	**120.9 ms**	**125.8 ms**	**126.8 ms**	**134.6 ms**	**126.8 ms**
Amp	8.19 uV	12.81 uV	5.42 uV	4.76 uV	7.73 uV	7.42 uV
Delta Lat	58.5 ms	37.1 ms	42.9 ms	46.8 ms	26.3 ms	48.8 ms
Amp	**8.51 uV**	**7.59 uV**	**7.09 uV**	**3.93 uV**	**4.98 uV**	**8.72 uV**
Eye	OU	OU	OU	OU	OU	OU
Test Duration	15 sec	15 sec	15 sec	15 sec	15 sec	15 sec
Contrast	85%	85%	85%	85%	85%	85%
Pattern	Checkerboard	Checkerboard	Checkerboard	Checkerboard	Checkerboard	Checkerboard
CheckSize	16 x 16	16 x 16	16 x 16	16 x 16	16 x 16	16 x 16

Figure 5. *Example of a VEP*

level reading, with ~165 fixations per 100 words and an average duration of fixation of 0.38 seconds, making his reading rate 97 words per min. At the two-month follow-up, he read significantly above his reading level. His fixations per 100 words were ~90, with 0.20 seconds duration of fixation, which resulted in a 333 words per minute reading rate.

Looking at the CDP from the initial evaluation, the patient's center of gravity was displaced to the right and on his heels. The sensory integration tests showed that the visual and somato-sensory systems were causing most of the disorganization for the integration of all three sensory systems. At the two-month follow up, the visual system showed improvement on the sway velocity chart, with no significant improvement of the somato-sensory system and the sensory integration value. Compared to initial findings, the alignment graph demonstrated marked improvement, and his posture was more centered; however, there remained some system disorganization.

Three months: At the three-month visit, the patient's stereopsis had improved from 70 to 30 seconds of arc. His pursuit and saccadic eye movements had increased in accuracy. The near point of convergence with a red lens had decreased to 4 inches. Importantly, there was a noticeable improvement with his posture: the patient was less fidgety and had more controlled

muscle tone with a straight head position. At that visit, the patient was going through other behavioral interventions, but the family was educated that vision therapy was needed in order to amplify improvements in convergence, oculomotor, and accommodative infacility. The patient started vision therapy a few months later.

Discussion

When patients have difficulty integrating the different sensory systems, this may result in central nervous system disorganization. In these situations, patients may have visual complications that could cause imbalance and/or visual symptoms that could result in stress and disorganization in their daily lives.

The VEP and CDP allow providers to obtain objective and unique diagnostic data in order to measure the speed and accuracy of the information being sent to the visual cortex, as well as to isolate and to differentiate sensory and motor system impairments. This in turn may positively affect the patient's functional limitations and disabilities.[10] Using the CDP, sensory organization tests provide us an ability to identify the abnormalities of the integration between three sensory systems (somato-sensory, visual, and vestibular) that contribute to postural control.[3] By isolating these sensory systems, we are probing the adaptive ability of the central nervous system and identifying where therapeutic lenses may be beneficial. Using the chair skill results, posturography, and VEP, a therapeutic lens can be designed specifically to the patient's needs to help them adapt and organize their spatial environment.

Conclusion

Sensory Processing Disorder is a condition where sensory information is disorganized when getting processed, resulting in behavioral and physical changes. After two months of wearing 0.75^{Δ} base in prism, the patient showed significant improvement in behavior, visual skills, and posture. By using neuro-sensory testing, providers can create a systemic approach to prescribing therapeutic prism glasses and create a consistent manner of measuring improvements of posture, gait, and/or spatial orientation.

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Correspondence regarding this article should be emailed to Poonam Nathu, OD, at poonam.nathu@gmail.com.

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The online version of this article contains digital enhancements.

APPENDIX 1:

Computerized Dynamic Posturography: The body relies on postural information from three systems: the visual system (eyes), the somato-sensory system (muscles and joints), and the vestibular system (inner ear-balance). Normally, these systems work together to provide information to the brain on how to keep upright and balance with movement through space. This test measures each of the above systems independently, as well as how they function as a unit.3 The CDP test results provide two sets of analyses, including the alignment graph shown on the right and the sway velocity bar graph on the left (Figure 1). The alignment graph measures the patient's center of gravity. For a patient with little or no irregularity in alignment, the geometric figures would be in the center of the chart. When there is significant variation in the location of the figures, this indicates that the patient may experience balance and stability complications. Referencing Figure 1, the bar graph to the left shows the average sway velocity in different situations. "Firm" refers to the patient standing on the platform only, while "foam" refers to the patient standing on six inches of foam on top of the platform. The first column, firm eyes open, depicts the overall integration of the three senses. The next data field, firm eyes closed, tests the vestibular and somato-sensory systems. In the third column, the patient stands on a 6-inch piece of foam with eyes open, in order to eliminate the proprioception feedback and isolate the visual system. Lastly, the foam eyes closed column isolates the vestibular system. Below are examples of a patient standing on the firm platform and the platform with the piece of foam.

APPENDIX 2:

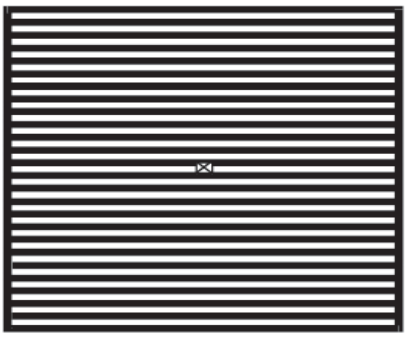
Visual Evoked Potential: The VEP directly measures the electrical activity in the visual system. When light from an image enters the eyes, it is converted into electricity at the retina. The electrical signal travels through the optic nerve and other pathways to the visual cortex, the part of our brain that processes vision, which is located at the posterior end of the brain. We measure the strength of the signal reaching the visual cortex and the speed with which it gets there. The analysis of the VEP graph is crucial in determining an effective prismatic lens. The vertical axis of the VEP indicates the amplitude of the signal, which will auto-scale depending on the highest amplitude reading of the patient. The amplitude is the quantitative measure of how much information is traveling to the visual cortex.[9] As the contrast level drops, the amplitude may decrease slightly as well. The horizontal axis of the graph represents the latency of the signal, ranging from 0 to 400 milliseconds (ms). A typical VEP graph will primarily consist of the N75-P100-N135 complex. The first major negative peak is the N75, which should occur around 75 ms. The N75 is a measurement of chronic visual stress, and a positive response can be measured when increased ambient visual processing and spatial organization is obtained.[3] The first major positive peak is the P100, which represents the time the electrical signal takes to travel from the retina to the visual cortex. The second major negative peak is the N135, which transpires around 135 ms. The N135 has not been used often in the analysis of the VEP.[9]

APPENDIX 3:

Binocular Dissonance Test for Textual Visual Aliasing Preface: This test helps to identify those individuals who respond either strongly, moderately, mildly, or not at all to the patterns. Those who screen out positively on the test grid should have a precision-based visual analysis to determine what, if any, performance prescription lenses might be desirable for reading, study, computing, and any and all other near work (video games, reading, etc.).

Conducting The Binocular Dissonance Test (Figure 5)

1) For use in screening, try to have the patient wear their habitual lenses; for diagnostic use, the patient's subjective prescription to best visual acuity should be assembled into a trial frame. If the patient has contact lenses for the test, the best spherical over-refraction should be in place.



2) Lighting should be as nearly daylight color temperature as possible, but the test can be effective (and revealing) in bright incandescent light as well. Pink fluorescent lighting is to be avoided.
3) The patient should be comfortably seated or standing, holding the cards so that there is no surface glare.
4) The tester asks, "What can you see?" (The response may be any of the following or may be "Nothing" or "Stripes with a square in the middle." This is fairly common.) If the answer has been less than the mirage values that occur, the tester then asks simply, "Do you see any colors?" and waits for comments. "Any movement?" – and, if needed – "Any shimmering or dancing in the pattern like snow on a TV screen?" and waits for comments. "Do you see any shadowy shapes? Any geometric forms?" and "Do you see the ink running together between the lines, like the ink ran on poor paper?" If there is strong aversive reaction as the target is presented, allow the patient gradually

to expose themselves to the grid, assuring them that they can quit if they are bothered too much or if they get nauseous or headachy. The examiner is attempting to determine (at least) the degree of disturbance and/or reduction that can be attained with closure of one eye, and even that measure of control may be enough to coax a reluctant observer to view the uncomfortable target (knowing that they can stop any distress by closing one eye).

5) The response is judged by the tester for its quality. "Strong" responders show physical reactions, pulling back or pushing the target away, facial distortions, and other bodily reactions. "Moderate" responders show no overt aversive movements but easily report mirages: the movements described in the questioning, color fringes (frequently pastels of yellow, pink, blue, or green), geometric shapes (most frequently a large diamond, triangles, more rarely arcs to either side of fixation), and caliber losses in varying amounts. "Light" responders may have to have their positive signs drawn out by the questioning (being careful not to lead the patient into satisfying you with positive answers). In clinical experience, these Light responders have often started out with no mirage awareness but may gradually attune to the types of observations being called for and can eventually observe almost all the mirage effects as the test progresses. "No response" responders show no overt awareness of the illusions, but yet some have shown dramatic response on the sample paragraphs and with long-term application of base-in prism. Thus, empirical trials may reveal great benefits to be had for even these apparently non-responsive individuals.

6) The subject is then asked to rate any amount of decrease in the mirage effects on a 10-1 scale. (This may not be possible on some adults and many children under 10 years of age or so. In these cases, the graded paragraphs are used in lieu of the grid.) With the initial response being given a quality value of 10, each lens and lens/prism combination is tried and rated for any improvement (or, rarely, a worsening, seen thus far mostly in individuals who were color deficient) of the effect. If the patient has had an S, M, or L response, ask the patient to close one eye and to note to what degree the effect changes. This is the benchmark reduction of effect that we are seeking to reproduce with the lens and prism combinations. It is often helpful to start the evaluation process by asking, "Has the disturbance gotten any better? If so, by how much? Is it down to a 5? Are we above or below a 5?" If there has been no improvement, try a different lens or lens/prism combination and repeat as necessary through all the lens/prism combinations, attempting to achieve as close an approximation with the lenses as the person sees with one eye closed. It may be helpful to ask, "Have we changed it to below a 5; is it a four? How much change has occurred? Is it above a five? Has it decreased to an eight?" (This helps the person to initiate a self-determined assessment, in terms of the quality of their comfort.) It is entirely appropriate for this to be a subjective process; it is the person's subjective comfort that we are assessing as far as the patient is immediately concerned, with the objective changes playing a very important but more secondary role.

7) The best lens/prism combination is then confirmed via an oral reading task with the graded paragraphs. First, empirically select a card of what seems to be an appropriate grade level, have them read, and then adjust up or down a level or two, finally choosing the card where reading fluency seems at its peak. (It may be wise to assure a reluctant reader that this is not a reading test, but rather a vision test that uses reading.) Then, after the person has read two or three sentences of the last selected card, introduce the lens flipper that achieved the best result on the mirage reduction, and note any changes in fluency, word attack, inflection, speed, and vocal quality as a positive indication of the need for a pair of performance lenses. As noted above, even "No-response" patients may demonstrate notable changes in reading with as little as 1^{Δ} BI, which can be ground into their lenses but needs to be verified closely at dispensing.

Non-Responders

Children under 10 years of age—or even some adults—may not be sensitive enough observers or have language skills to describe what they are seeing on the pattern grid. The graded paragraphs included with this test are reproduced in the 50% duty cycle ratio for use in these cases. Assure the individual that though he or she will be reading aloud, this is not a reading test but is a vision test to see whether their reading can be helped with minor changes in their eye coordination. Select an appropriate paragraph (parents can be asked for the approximate grade level for a second or third grader). Allow the individual to read two or three sentences, then introduce the flippers with the lenses, prisms, lens/prism combination while they continue to read. Note any changes in reading speed, inflection, fluency, appropriate following of punctuation, word attack, inflection, accuracy of tracking, and voice quality.

Prescribing

The individuals who respond most dramatically are usually sensitive to all aspects of their lens needs, including small cylinders, axes, and anisometropia. Therefore, the most precise subjective lens evaluation that can be determined is used as a base for the flipper lens trials and ultimate prescription. This prescription should quickly be assembled in a trial lens frame and the demonstration conducted over those lenses.

The total time for this evaluation is usually less than five minutes, but it is an extremely valuable contribution to the individual's reading, work, and learning experience. The final prescription may take on the form of a reading-only pair of glasses, a bifocal (the +0.50 responders), or a Subjective to first 20/20 (in OEP parlance, the #7 value, usually a +0.25 D or +0.50 D difference).