

# OEP

## CLINICAL CURRICULUM NEWS

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### OEP East Office Move

Effective September 1, 2010, the OEP East office moved from Cockeysville, Maryland to their new office at 22 West Padonia Road, Suite A 313, Timonium, Maryland 20193, Karen Ruder and Theresa Krejci can still be reached at their old phone and fax numbers, and the email addresses remain the same as well. Feel free to contact them at 800 447 0370 phone, 410 252 1719 fax, or [Karen.Ruder@verizon.net](mailto:Karen.Ruder@verizon.net) or [TheresaKrejciOEP@verizon.net](mailto:TheresaKrejciOEP@verizon.net). All education operations that used to be handled by Karen and Theresa at the OEP East office in Cockeysville will continue to be handled in their new location right up the street in Timonium.

### Case Consultation Corner

*By: Rob Lewis, O.D.*

Jessica's mother brought her into our office for her first exam at 5½ years of age. Tracking, locating, and focus stability were all less than ideal, but there were no accompanying symptoms. Nearpoint plus lenses were prescribed because of the risk of visually related learning problems (VRLP) as Jessica entered school. At the time of her next visit, she was 6½. Jessica worked very hard to stay on target, yet her eye movement performance was comparable to that expected of a 3 year old. She had strong 3-D projection on a Keystone Basic Binocular test grasping the virtual figure at about 10 cm.

At that time distance retinoscopy showed: OD +1.00-0.50 X 180 OD

OS +0.50 Sphere

Near retinoscopy showed: OD +1.50 Sphere

OS +1.50 Sphere

Jessica was doing fairly well in math, but was having extreme difficulty in reading and written expression at the Montessori school she is attending. She struggled to complete assignments. She was not able to write any of the sight words expected of first graders at her school. She was able to identify only 11 of 41 by sight. She was able to answer questions from a story if the story was read to her, but was unable to read the story or the questions herself. Since she had many of the symptoms common to both ADD and VRLD, her teachers suggested that she be evaluated for ADD and possibly be prescribed a stimulant medication. Her physician asked a key question. "Does she have the same difficulties at home that she has at school?" Because the answer was no, he was not anxious to prescribe medication if an alternative could be found.

Based on visual skills that were not adequate to support the academic performance expected of a child her age, visual therapy in combination with plus lenses was chosen as the treatment of choice.

The beginning of VT was delayed until a scholarship slot became available for Jessica. At the beginning of therapy, she was now in the first grade, nearly eight years of age, and still could identify only 19 of the 41 first grade sight words. She could not read a story or the accompanying questions. She could answer questions appropriate for grade level when the material was presented orally. After 35 sessions of a modified VT-2 curriculum and using her lenses, Jessica is able to read 38 of 46 second grade sight words

and was able to read second grade stories and questions on her own. Her mechanics still leave some room for improvement, but she has progressed from pre-first grade reading levels to the performance expected for her grade in less than 9 months.

Her analytical findings now show #7 (Maximum Plus to 20/20) of +1.75 O.U. with ½ exophoria. 14B is also +1.75 with 6 exophoria. She now tests with 30 arc seconds of Randot stereo.

Almost all of the indicators on the COVD Lifestyle checklist are improved. Her overall lifestyle score changed from 48 to 18. Her reading performance, although improved, still has room for improvement. Written expression has improved to the expected level. She is now able to follow directions, organize and complete her assignments on time. Her mother and her teachers are pleased with her strong performance and looking forward to an even better future as she completes visual therapy.

## Questions and Answers

### Stress Point Retinoscopy

*By Paul Harris, O. D.*

The following is in response to a series of questions posed by a Swiss optometrist after completing the Art & Science Course.

#### **1. Do you work with dark room illumination?**

There is an interesting tension here between the following. (1) Dim illumination will open up the patient's pupil and give you more to see in the reflex. It will also help you stabilize the retinoscope, which is one of the hardest things with which to become competent with this procedure. (2) The dimmer the light the less "real" the environment is for the patient and the less able they are to lock in on the target. In general, the dimmer the world the more passive the patient will be and the less like the life situation for which we want to prescribe. Therefore the recommendation is that you should always work towards normal room lighting. At first though, you will need to reduce the light levels in the room to assist you in learning the technique. Constantly work toward full room illumination.

#### **2. Does the patient wear habitual lenses? Do you work with patient's glasses, contact lenses, trial frame or, with the phoropter?**

Let's assume this is the first time we are seeing this person. In the normal sequence of things, stress point retinoscopy is done at the end of the chair tests before we begin the analytical. Some judgment is required here. Let's assume for practical purposes, that the person clearly demonstrates what their habitual near condition is. Of course, this can vary from no lenses, to contacts, to half-eyes over contacts, etc. Let's assume that they have with them their usual method of looking at a near target and that it is not broken. We do the stress point retinoscopy through this set of lenses.

Since I do not neutralize the patient's eyewear until after the evaluation, I do not know precisely what I'm doing my retinoscopy through. I know only that the person has told me this is what they are using to do their current close work. This gives me a great opportunity to evaluate their current status by first just looking at the reflex as they look at the Wolff wand at their Harmon distance without any additional lenses being introduced. It is remarkable how much one can see and begin to understand about the patient and how they deal with their near world by simply looking at the reflex at this point. Dr. Glen Steele calls this, "Just Look" retinoscopy and points out how we need to first take a good look at what we see before beginning the observation for the stress point or manipulating it with lenses.

After the rest of the testing is done and the patient's lenses (glasses and/or contacts) have been neutralized, then the actual net effects of the lenses used to shift the stress point in space can be accurately assessed. It is far more important to get the person in as natural a condition for them as possible. As they become more natural and comfortable, your confidence in the clinical insights gained should increase significantly. For this reason, I do not use the phoropter or trial lenses etc. during this procedure.

**3. Do you sit at the Harmon distance of the patient with the retinoscope in front of patient's nose?**

Yes, this is the basic set up position. The retinoscope should be on the midline of the patient. The scope should be the patient's own Harmon distance away from their face.

**4. Do you work with the leading eye of the patient?**

As postulated by Harmon and Kraskin and as observed by many in clinical practice, it does not matter which eye you look at. The change from fight to flight is a total response of the organism and will occur throughout the entire body at the same time. The changes in reflectivity will occur in both eyes at the same time and these changes will occur just before the detectable changes in heart rate and blood pressure, etc. So in practice, it does not matter which eye you are scoping. In cases of frank pathology that obscures the view, choose the eye that gives more light back.

**5. Do you hold the silver Wolff wand on top of the retinoscope?**

First there are both silver and gold Wolff wands and there are some wands that are highly polished and some that are dull. It is more important to use the highly polished wand vs. the dull wand. The highly polished wand provides more alternate ways for the person to look at the wand than a dull one. They can look at the reflection in the wand, or alternately look at the surface of the wand or in the area of the wand, etc. As for the color, I have not found any significant changes with the silver vs. the gold.

I do hold the wand in such a way that it sits directly on top of the head of my scope. Because I use a Welch Allyn retinoscope, this brings about as close of an alignment as possible between the path of my scope light and the line of sight of the patient. I like the feel of the two locked at start, with the wand in touch with the scope. This gives me a great starting point from which I can begin the slow movement of the wand towards the patient. I have seen others begin with the wand below the line of sight of the light. To do this, one must already begin slightly closer than the Harmon distance. Yes, it is only the distance of the wand itself, if you actually touch the retinoscope, but that little difference in the starting place of your target may be significant in some cases.

**6. Does the patient look at the Wolff wand the whole time?**

Yes. The target they are to look at throughout is the Wolff wand. I do not direct them to look at it in any specific way. I feel that it is best to allow them to choose to look at it in whatever way they choose. They will do this any way. I try not to deceive myself into thinking that just because I ask a person to look at something in a particular manner that they (A) know what I mean and (B) know how to execute that request in a way that is different than other ways.

**7. Do you observe the brightness of the retinal reflex in the patient's selected eye?**

Yes, but also look at more. For example:

Quality	Observation
Stability	Does the reflex settle down or is it constantly varying in various other qualities?
Brightness	What is the overall brightness and are the two eyes/channels similar?
Distribution of light	Is the brightness the same throughout the pupil or are there hot spots and do those hot spots shift or change?

**8. Do you shift the Wolff wand 10 cm closer to the patient’s eye while the patient continues looking at the Wolff wand?**

Yes and no. If you are doing the procedure as written about by Robert Kraskin in “Lens Power in Action”, then you move the wand in on the midline of the patient until you see the change from fight to flight in the reflex and record the distance from the patient’s nose. For most optometrists learning the procedure, this is quite difficult and requires very astute observation skills, in particular, because as you move close to the patient, they will be moving their eyes inward as they converge. This introduces some variations in fixation that can often lead to erroneous observations; meaning that you see a change that you attribute to a real change from fight to flight, when in reality the scope just got off axis momentarily. With retinoscopes with narrow beams this error comes up often. With the wider beam of the pure spot scope it is easier to keep the light of the scope aligned with the optics of the eye enough to see the real change as the reflected brightness/luminance changes.

It is precisely because of this that the procedure was modified in accordance with a key point made by Harmon himself, which leads to the following clinical pearl which is explained in the proceeding paragraph.

**Clinical Pearl: If you can move the wand 10 cm towards the patient and no change has occurred, more plus acceptance is available.**

Harmon stated that one should not shift the stress point any further away from the patient by using lenses than would shift in closer to the patient than 10 cm in from their Harmon distance. Clinically speaking what this means is, if you can move the Wolff wand in more than 10 cm without observing the change in the reflex, you could add more plus before the patient’s eyes. The key then is to find the maximum plus you can add that pushes the stress point no further away from the patient than 10 cm inside of their Harmon distance. This is the reason why you generally do not need to move more than 10 cm with the wand.

**9. Do you hold different plus lenses in front of the patient’s observed eye?**

Well, unless you have three hands you can’t do the holding of the lenses. We might say, “place” the plus lenses in front of the patients eyes. So there are two points to clarify here. I detect a holdover from the popular MEM method of Dr. Harold Haynes where a single lens was placed in front of one eye for a brief moment. In stress point retinoscopy, we place a pair of matched lenses in front of both eyes, give the patient a moment to look through those lenses at the Wolff wand in the starting position on top of the retinoscope, before we begin moving the wand closer.

Dr. Kraskin used actual eyeglass frames with lenses in them that were big enough to go over a patient’s existing frames. He had multiple sets of glasses with lenses at his chair side. I use flippers and have a set of them made up with balanced plus pairs from +0.25 D to +2.00 D in 0.25 D steps. The point has

been raised that the act of having a patient hold a flipper up with one hand may be a confounding factor altering the results because they did no such asymmetric thing during the baseline testing with just their habitual lenses. I would agree, if one were doing formal research, this degree of control would be necessary; but in a clinical situation, I believe we can take these liberties. If for any reason, you see some very odd shift when the person raises their arm to hold the flipper, I would ask an assistant to come in to hold the flipper.

**10. Is the highest plus lens that doesn't change the bright reflex the right one? If the reflex suddenly becomes dull, does that mean the plus lens before this one was the right one?**

All lenses will have a place in space where the reflex will change. Binocular sphere powers are used to shift that transition place in space. We may ask two different questions of the procedure. Kraskin asked, "What lens will bring the stress point closest to the person?" This yielded a lens that would help the person at near in the most efficient way possible. To perform this task, requires probing inwards to find the fight-flight interface with many different sets of lenses and recording the place in space where the change occurred with each lens pair, eventually zeroing in on the lens power that brought the point closest to the patient. This is very time consuming and requires finesse with the retinoscope that few possess.

When asking the question, "What is the maximum plus we could prescribe if we wanted to prescribe maximum plus at near?" we are asking a very different question. Here the endpoint is the highest plus lens that allows us to move the Wolff wand to just inside 10 cm of the patient's Harmon distance. I record the highest lens that lets me move inside that point, not the next higher lens that does not let me get to that point.

## **Remaining Clinical Curriculum Course Schedule 2010**

2010 November 3-7	VT/Visual Dysfunctions, Pomona, California, Western University College of Optometry, Instructor Rob Lewis, O.D., FCOVD
2010 November 4-8	Art & Science of Optometric Care –A Behavioral Perspective, Grand Rapids, Michigan, Instructor Steen Aalberg, FCOVD

## **Partial Clinical Curriculum Course Schedule 2011**

2011 February 17-21	VT/Learning Related Visual Problems, Southern College of Optometry, Memphis, Tennessee, Instructor, Paul Harris, O.D., FCOVD
2011 March 3-6	VT/Strabismus & Amblyopia, Phoenix, Arizona, Instructor Rob Lewis, O.D.
2011 May 11-15	Art & Science of Optometric Care – A Behavioral Perspective, Phoenix, Arizona, Instructor, Rob Lewis, O.D., FCOVD
2011 May 18-22	VT/Visual Dysfunctions, Ft. Lauderdale, Florida, Co-sponsored by NOVA Southeastern University, College of Optometry, Instructor, Robert Hohendorf, O.D.
2011 June 4-6	Acquired Brain Injury/Traumatic Brain Injury, Baltimore, Maryland Instructor, Paul Harris, O.D., FCOVD

Please check the OEP Web Site, [www.oepf.org](http://www.oepf.org) for complete course schedules.