

# *OEP*

## *CLINICAL CURRICULUM NEWS*

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### **Visicare Card Change**

Quite some time ago, OEP, together with Bernell, formulated a special set of Visicare Cards specifically designed for use with the Clinical Curriculum therapy program. One card, the Pre Fusion Card PA 5 (Triangles & Line) card was placed in this set by mistake. If you purchased a set of these cards with the PA 5 card, a replacement card is now available from Bernell. If you would like to replace the PA 5 card with the new CB 1 Convergence B card (Ramp Therapy) you can do so by calling Bernell, 1 800 348 2225, and ask for the BABO set Visicare replacement card by Morganstern. This single card can be purchased for just \$18.00. If you have any difficulty with this process, please call Theresa or Karen, 800 447 0370 at the OEP Office.

### **Using Case Consults; “A How To” Putting the OEP Clinical Curriculum Courses into action**

*By: Paul Harris, O.D., Instructor*

The instructors and staff at OEP recognize the delicate balance between factors such as time out of the office to take the courses, the amount of material to be presented, the amount of supporting research and theory, the amount of practical hands-on in the diagnostic and treatment portions of the course, and the amount of practice needed to really own or embed the new concepts, ideas, and procedures.

The ideal teaching situation would be to work in very small groups over an extended period of time, with alternating periods of didactic sessions interspersed with supervised time working with real live patients. Since for most people spending extended periods of time out of their offices is just not possible, what we have done is to fill the course times with massive amounts of knowledge and information as well as a map and a plan for what to strive for in terms of the testing and treatment protocols used in the office. In many cases, it will take many repetitions until you feel comfortable with doing a procedure as prescribed, or actually getting to the point where you stop thinking about the mechanics of the procedure and get to observe fully the behaviors displayed by your patients.

When looking over post-course evaluations, we often see comments like: “We need more case examples” or “We need more hands-on time to work with the procedures.” In an ideal circumstance, we would be able to satisfy both of these needs. However, I am reminded here of the quote, which I will paraphrase, by the late Bruce Wolff, OD. He stated: “For the person who is asking for theory; they need to work with patients and get hands-on clinical experience; and for the person asking for procedures, or a cook book, they need theory.” His point was that as we come into a field we generally seem to be asking for exactly the opposite of what is needed at the time.

You might be saying, “OK, I get the point, but I still feel lost and feel like I don’t know how to put this all together. How do I get going when it all seems like such a jumble?” The answer: CASE CONSULTS!

Some Clinical Curriculum Course attendees have said that they don't even know what to begin to ask, or that they don't know enough to do a case consult. The following is an explanation on how to use case consults to implement the knowledge base you have invested in by taking the OEP Clinical Curriculum Courses.

Each of you will come to The Art and Science of Optometry Care – A Behavioral Perspective Course with an exam routine that you have been doing for a while and have grown comfortable with. The first step is to begin collecting data in a similar fashion as to how it was demonstrated and talked about in the Art & Science Course. Two of the five days of that course are spent going step-by-step through each element of the testing sequence from the case history, through the chair tests, through the analytical.

At this point, you may have the data in the new form, but don't feel confident in the validity of the numbers you have written down. A good example is a test that is new for many, stress point retinoscopy. It may take 50 patients before you feel you have confidence in the validity of your finding on this test. So now, you have a new set of numbers taken in a different routine in which you have a degree of uncertainty.

### Case Consult to the Rescue

Now is the time for a consult. Get the data onto the exam form and fax the form to Karen or Theresa at 1-410-252-1719. Be sure to put your name and office phone number on it, as well as when you will be in the office. Please instruct your staff that a Clinical Curriculum Instructor will be calling. We ask that you take our call rather than starting phone tag. If you are with a patient, let us know at the beginning of the call and if we feel there is a lot to go through, we will schedule a time for an extended conversation.

We will then go through the data, helping you understand the relationship between the data and the patient and their behaviors. Often we will ask some questions that will help us get a sense of the degree to which you have integrated the information from the course. At times, we may recommend some readings or suggest we do a follow-up call to get more in depth in some areas. Many times as we begin a sentence about something over the phone we can hear the Ah-Ha go off signaling the crystallization of a fundamental understanding of some course material. Often, until you have a real live case that is your own that you have tried to look at in this new way, it won't click fully until our phone call. This is what we, the instructors, live for; to facilitate and experience that Ah-Ha with you.

We have witnessed meeting after meeting where cases are presented. 45 to 60 minutes of data is presented. Finally, they get to discuss the ins and outs of the case and now the data is down and it's too hard to integrate because there isn't a real person there. When you have a real person that is your patient asking you for help, you invest much more into understanding who they are and what makes them tick. With your data in front of us, we will walk you through step-by-step the types of questions and thinking we would use with the same patient. You will walk away with a much greater appreciation for the massive amount of content you were exposed to in the courses and will be aided in moving through the full integration of that knowledge into working with your patients.

On the backside of the exam form there are three sections for writing down each of three treatment options. We would like you to take a stab at writing in a lens formula that would correspond to each approach to caring for your patient. Below each lens formula, write out what you think will be the

consequence of the patient selecting that option. This will help the instructor who calls you to get a sense of your thinking about the case.

Generally, we expect several cases to come in from each attendee the first week after taking the Art & Science Course. Over time, the numbers of calls and the type of calls changes. After a few months you will send in an occasional case with the alternatives all thought out and filled in on the exam form and we will often call and give you positive feedback that the plans you have are on target. At this point, you will know that you have turned the corner from cook to chef!

The instructors work on a “waitress” system. Karen and Theresa keep track of whose turn it is for case consults and they give the record you send to that instructor. Make sure you send all case consults in to Karen or Theresa. You may also e-mail cases, but we find this harder to deal with because we have become accustomed to looking over the record card so quickly when everything is in its place. Looking over even the most meticulously typed e-mail takes much longer.

Using the Clinical Curriculum case consult is the main method whereby many Clinical Curriculum course attendees put the information and knowledge they obtained in the courses into action. The FREE case consultation is available following all Clinical Curriculum Courses. Don’t be shy and remember the only dumb question is the question you don’t ask.

For a copy of the exam form from the Art & Science Course go to [www.oepf.org](http://www.oepf.org) and click on exam form to download the form for the case consult.

## **Consultation Corner**

*By Rob Lewis, O.D.*

Many case reports are written to describe a patient from initial evaluation through a course of therapy to illustrate a significant principle or therapeutic approach. This case report does begin with the initial evaluation and follows through to the current time, but a significant difference is that this patient’s history with us began just one week ago.

Kelly, a twelve year old boy, was referred to us by his tutor, a long time patient. His least favorite thing is school. When at school, Kelly likes reading best and math least of all school activities. He came to our office with a history including poor sports performance, although Kelly’s favorite activity is baseball. Kelly likes to play third base and he wants to play professional baseball like his father.

Kelly’s history is remarkable for a visual exam with his uncle, who is an optometrist. This examination resulted in a pair of “reading” glasses Kelly did not bring with him to the exam. Kelly had not been using the glasses and they were seen to be of little benefit.

Here are some relevant findings:

Visual Health as expected for a young man of his age

Visual Acuity            OD 20/25-      OS 20/20

Cover test              Ortho both near and far.

3 Diopter Base Out Prism Test       $\mu$ Tropia OD

Eye Movements:      Accurate and smooth with good attention

Appropriate float and projection with the Keystone Basic Binocular Test (with or without lenses)

Random Dot Stereopsis: 100 seconds of arc—slow to respond +2.00 subjectively increases the float

#4 OD +3.25  
OS +2.00

#7 OD +3.25  
OS +2.50

#8 Through #7 3 eso

#8 Through +2.50 OU 3 eso

#13 Through +2.50 OU 3 eso

#13 Through +3.50 OU 2 eso

#14a unstable OD +3.25  
OS +2.50

#20 net Greater than -8.00

#21 net +0.50/pl

This particular case is interesting from quite a few points of view.

One of the most significant is that it appears that either the previous examination missed a great deal, or Kelly's uncle understands vision in a very different way than we do. This case reminds us not to take findings for granted. Just because another doctor looked, doesn't mean the doctor saw what you see or that the other doctor understands things in the way you do.

Many times I have heard it said that a person with microtropia is a well adapted person who will not benefit from vision therapy. Microtropia is a highly adapted, but not necessarily well adapted, state. To function with microtropia, a person must accept a non-veridical and limited view, not only seeing with reduced depth and resolution, but using significant intellectual and energy resources to do so.

In this case, Kelly finds school and learning an unhappy experience, and his favorite avocation challenging based on visual difficulties for which treatment is available and usually successful. Vision therapy, including wearing the appropriate lenses, can offer Kelly improved academic and sports ability.

In cases like Kelly's, it is important not to focus one's energy and attention on the adaptation, in this case microtropia, and to address the reasons that he has been using the microtropic adaptation as the best way he can see. At the most basic, Kelly has not developed the visual skill necessary to use the information from his two eyes without confusion. A slight misalignment of the foveal axis in combination with his hyperopic refractive state act in concert to reduce resolution until an acceptable level of visual information can be used without confusion.

A powerful solution for Kelly's performance problems is to develop his visual skill until there is no longer a need for intellectually and energy inefficient adaptations. As the process of development takes place through therapy, he will have less and less need for the adaptive strategies. As skill builds, the less efficient limiting strategies will fall by the wayside. We would expect to see improved ability to direct action, including more graceful movement, improved acuity, and improved stereopsis. This overall pattern of less limited behavior can emerge, not because we broke down less useful adaptations, but because the adaptive behaviors are less needed as improved visual skill renders them obsolete.

# **THE INFLUENCE OF TV, VIDEO-GAMES AND COMPUTERS ON CHILDREN**

*By: Paul Harris, O.D.*

The following is Paul Harris' response to a question asked by one of our Clinical Curriculum attendees from Norway.

**Question:** I am having a meeting at my son's class and we will be talking about what influence television, video-games, and computers have on our children. Could you give me some tips on this subject?

**Answer:** There are several things that come to mind. I would group the responses in the following way:

1. **Visual stress factors and binocular challenges:** Here the concerns are how the electronic screen demands can be a stimulus towards the development of myopia and towards smaller perceptual fields. The longer a person stays at one distance, with one size screen, the higher the probability they will shrink their habitual visual perceptual volume to what they attend, to the size of the screens they are viewing. When they move to life situations, they may not attend to the life events that occur in these other areas. The lack of gross motor movement and confinement may also be potential driving factors for the development of myopia. Some other questions we might ask along these lines are what long-term consequences might there be from fooling the visual system into thinking it is working in a three-dimensional environment when indeed it is looking at a flat screen? What does this teach in terms of depth perception? Is there any transference to the "real world"? Might it actually harm a person's ability to judge where things are in real space after dealing with two-dimensional representations of three-dimensional space for so long? What are the time and intensity thresholds involved in all these questions? These are all big questions. Thus, it would seem that there is a need to mix in healthy periods of gross motor movement and spatial interaction with three-dimensional demands similar to those experienced in the artificial environment in order to continue development of all these abilities for use in the real world.

2. **Tracking:** There is a fallacy here I think. Some say, "Well, at least this is good for developing tracking." I'm not so sure about this. So many children can do well on these computer games and then when we see them, their tracking skills with real objects in real space seem developmentally delayed. They tend to shy away from involvement in sports with high speed moving small objects (balls). Developmentally, we think of tracking a real object in space as being the foundation of all tracking through space, be it two- or three-dimensional tracking. After they develop the ability in three-dimensional space, they then transfer this to the two-dimensional plane. Some kids do not make this transition and spend more and more time in the three dimensional demands and get very good at them while avoiding interactions with two-dimensional work. This leads to the myth of the dumb jock who is good in sports and not good in school. Often they simply didn't make this critical developmental transition. Due to spending more time in the three dimensional demands they became quite good at handling them and became recognized for this excellence. However, the avoidance of the two-dimensional may have led to a lack of development and therefore a lack of achievement in academics that unfairly fails to reflect the actual intellect of the child. Thus, our approach in the OEP Vision Therapy curriculum is to first work with real objects in space, and later work toward confinement in

two-dimensional space. This transition is done first through large flat surfaces like the chalkboard and then into smaller and smaller spaces ending in the 8.5 X 11 or A4 type paper environment.

With the computer game addict, they seem to be developing a specialized skill in a specialized environment that may not transfer to real life in a meaningful way. So instead of developing “tracking”, the ability to shift through space where the person puts their visual attention, they are actually decreasing the amount of time interacting with real objects in three-dimensions and therefore decreasing the probability that they will develop that skill or ability on their own. It has also been noted that some of the very good game players develop a stare, a sort of soft focus, and they don't actually track anything. They just react.

**3. Visualization and Imagery:** Here, the discussion has revolved around the fact that while using a computer game, the child does not have to make any real internal pictures but may passively receive the pictures from the screen and just react in real time. To a large degree, I agree with this. However, some of these games require the child to keep track of a huge map in his mind secondary to the fact they only have a small bit of the map or playing area visible on the screen at once. To perform the task of the game, they may have to remember that a particular thing is needed from a spot on the playing surface that is out of view and remember the pathway to it. To be successful in this type of game, the child must build these rather large and complex maps in their mind. In some games, the sequencing of the actions taken is critical. You must pick up the lantern the first time you see it so that later when you get into the dark area, you can see where you are going. If you don't do this, you can't go back and get the lantern because some monster will now be awake. He was asleep the first time you went through but now he is awake and you just can't get back that way. So, start over, and remember, you must pick up the lantern! To some degree, I see these things as excellent in developing long range planning and problem solving tasks.

**4. Eye hand coordination:** Again we may hear the calls of those in favor of these activities saying that at least these games are working to improve eye-hand coordination. This appears also to be another fallacy. Watching objects move through a fake three-dimensional world, on a two-dimensional screen, confined to a 14 or 15 inch world and then making pushes on arrow keys and other selected keys to perform actions (or using a joystick), where all the actions are fine motor and not gross motor, means we are not really working eye hand coordination in the true sense of the words. It is a specialized skill that probably will have little transfer to everyday activities. Even in the situation where one is playing with a game like the Nintendo Wii with controllers that monitor movements of one part of your body in three-dimensional space, you are still overlaying that onto a two-dimensional array where shifts through space can only be simulated.