“Houston, we have a problem”

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- **Financial Disclosure:**
- **I am a clinical consultant to Eschenbach Optik of America**
- **All course materials were developed by me independently and without commercial bias**
- **Any product shown in my presentation is for illustration purposes only and not an endorsement or recommendation of any manufacturer or product**

- **In low vision care we are really only manipulating three variables**
  - Enhance contrast/ control glare
  - Make the image large enough (magnify)
  - Help the patient learn to use their remaining vision more constructively
- Three ways we can enhance contrast
- Better lighting
  - Studies show most patients require 3 to 10 times better lighting
  - Also the “color” of the light impacts performance
  - The trick is to balance the color of the light with the intensity of the light
- Improve the figure-ground relationship
  - Weber law/scale
  - Eye charts are designed to approach 100%
  - The real world is a low contrast setting
- Tinted lenses
  - Some colors enhance contrast and other mute contrast

- We are challenged to balance contrast loss with increased glare sensitivity
- Typical Low vision colors
- As you know, the most common colors used in low vision range from yellow thru the oranges and dark ambers on into a dark red.
- Yellow seems to give the most contrast enhancement, but not much glare reduction.
- Orange is a pretty much a "middle of the road" tint in the LV world. Good contrast enhancement with moderate glare control.
- Dark amber gives more glare control, but with contrast enhancement. Usually helpful when photophobia is more of a factor.
- Red has the greatest glare reduction property of this series of tints with some contrast appreciation.
- Remember, you are attempting to balance the need for contrast enhancement and glare control… Art or Science?
- FL-41 tint…..
- The FL-41filter is a 'boysenberry-ish' colored tint that has been found to be useful in patients with migraine headaches, blepharospasm, light triggered seizures, Computer Vision Syndrome (CVS) / digital eye strain and other light-sensitive/triggered conditions.
- FL-41 was first described in a research project that took place in Birmingham, England in the early 90s. In this study, children with migraine headaches wore FL-41 filtered spectacles.
- The researchers found that wearing the FL-41 filter improved the light sensitivity in these children, as well as lessened the frequency and severity of their migraine headaches. Since that time, FL-41 filtered lenses have been used to treat these and other conditions.
- More recently FL-41 has been reportedly helpful for Traumatic Brain Injury (TBI), but it is difficult to find any literature that site studies that support this information.
- https://healthcare.utah.edu/morann/optometry/f41-lenses/
- **Magnification….**
    - Predict the level of enlargement needed for a specific task

- Measured VA “divided by the” Goal VA
- A bit more magnification for a “cushion” or “reserve” is OK
- Remember that more magnification is often not the answer but rather a tell tale sign……..

- **Eye charts for low vision**

  IV infusion stand and a Fienbloom # chart

- **Binocular “interference” and eye dominace**
  - Patient has lost significant VA in one eye but has fairly good VA in the other.
  - However the complaint is I can’t read…
  - First test VA at near with the better seeing eye.
  - Then evaluate reading Cadence with just the better seeing eye using continuous text reading .
- **How were you taught to train or evaluate a patient with a simple hand magnifier?**
  - need to Rx a simple handheld magnifier.
  - dispensing and training tips were you taught when the better seeing eye was not the dominant eye…..yet the dominant eye interfered or possibly the patient couldn’t close the interfering eye?
- **Telescope powers are easy to predict**…. Just take the through glasses VA ÷ goal VA = the power of the TS. 20/200 VA and goal of 20/50 = 4X TS
- If you aren’t comfortable with insurance coding for low vision some of these “boiler plate phrases may help……
- **Visual Impairment Codes**
  ICD-10
  10/01/2025

- The table on which these new rules were based comes from the Resolution of the International Council of Ophthalmology (2002) and the Recommendations of the WHO Consultation on "Development of Standards for Characterization of Vision Loss and Visual Functioning" (Sept 2003) which lists expressions of visual acuity for

the lower limit for "moderate visual impairment" and for the upper limit for "mild or no visual impairment":

1. 6/18 (which is equal to 20/60)
2. So, if the VA is worse than 20/61 then you may use vision impairment codes.....

- **In your progress note make a beginning statement**..... "This was not an ocular health examination but rather to determine if the patient's functional skills could be improved with low vision aids and or low vision rehabilitation. The patient will continue to be followed by Dr. *** for ocular health issues."
- Document the amount of face-to-face time spent in counseling and education. An example would be.... "Of this *** visit over 50% was spend in patient counseling and education." Total time at the visit counts!
- **Review your communications skills.** In my experience successful low vision providers communicate very well. Use analogies to help patient's understand difficult concepts. You can always be more technical, but you often don't get a second chance to make a point.
- **"These reading glasses are not working!"**
- Problem:
  - In the office you determine a power of reading glasses that allows the patient to read with good speed and comprehension
  - The next day you get a phone call that the readers don't work!
  - You go over the working distance, etc.
  - Often the patient reports that in the office they didn't have to hold things close!
- **When using high powered aids such as microscopic readers or hand mags the close working distance can be a learning challenge for the patient**
  - A simple pipe cleaner may be all it takes
  - Thus, the "fuzzy wuzzy" focal finder was born!

- **Remember, in the office you have lots of control over the patient's actions**
    - If they perform in the office but can't at home, it is usually either lack of illumination or poor technique.
    - Reinforce what you say with a written summary of written instructions
    - Call the patient and see how they are doing the very next day.... Helps your success rate!

- **Speeding the exam process and improving your success with simple aids..**
    - How were you taught to train or evaluate a patient with a simple hand magnifier?
    - What dispensing and training tips were you taught when the better seeing eye was not the dominant eye.....yet the dominant eye interfered or possibly the patient couldn't close the interfering eye?
    - Dominant but poorer VA eye
    - Non-dominant but better seeing eye
- **You need to Rx a simple hand held Telescope. The patient can't "wink" the bad eye and it causes interference**
    - The same technique works great!!!!
    - Telescope powers are easy to predict.... Just take the through glasses VA ÷ goal VA = the power of the TS. 20/200 VA and goal of 20/50 = 4X TS
- **Visual Impairment Codes**

  ICD-10

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    1. 6/18 (which is equal to 20/60)
    2. So, if the VA is worse than 20/61 then you may use vision impairment codes.....

- My suggestions……
- In your progress note make a beginning statement…… “This was not an ocular health examination but rather to determine if the patient’s functional skills could be improved with low vision aids and or low vision rehabilitation. The patient will continue to be followed by Dr. *** for ocular health issues.”
- Document the amount of time including, records review, exam and wrap up. All time on the day of the visit counts!
- Review your communications skills. In my experience successful low vision providers communicate very well. Use analogies to help patient’s understand difficult concepts. You can always be more technical, but you often don’t get a second chance to make a point.
- “These reading glasses
  are not working!”
- Problem:
  - In the office you determine a power of reading glasses that allows the patient to read with good speed and comprehension
  - The next day you get a phone call that the readers don’t work!
  - You go over the working distance, etc.
  - Often the patient reports that in the office they didn’t have to hold things close!
- Simple is often better
  - When using high powered aids such as microscopic readers or hand mags the close working distance can be a learning challenge for the patient
  - A simple pipe cleaner may be all it takes
- Alternate technique……
  - Reinforce what you say with a written summary of written instructions
  - We call the patient and see how they are doing the very next day…. Helps your success rate!