DON’T BE IN THE DARK

Visual Field Training for Techs

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Are you mad at me?

- Banished to Siberia aka the Visual Field room
- Long
- Boring
- Dark
- Strange patient
- Confusing
Can indicate a problem
- Glaucoma
- Tumor
- Aneurysm
- Strokes
- Optic nerve disease
- Many more
Just be glad...
Ughh!
FREQUENCY DOUBLING TECHNOLOGY

- Quick Screener-45 sec
- As you are inputting patient info…”Can you see the wavy lines? Good, that is what you will be looking for”
- NO eye patch needed
- NO trial lenses (+/- 7 D)
- Small (19lbs)
- Less expensive that other VF
Have you ever had a patient complain that their vision “Greying out”? 

“Hmm that’s weird!”
Oculus Easy Field

- Both screening and threshold
- Cost effective
- Patient info was a bit more difficult to input (from my experience)
HUMPHREY

- Most commonly used for Threshold Tests
- Requires eye patch
- Also need trial lenses
- Humphrey has dominated glaucoma field
- Standard vs FAST
VF testing on Small Children

- Give them a fixation target
- Bring in 2\textsuperscript{nd} object from side
- Note approximately when they notive 2\textsuperscript{nd} object
- Takes 2 & Move Fast!
SCREENING

- Some type of peripheral vision assessment should be done (attempted) on every full exam
- Can be Finger Counting
- FDT on all patients > 9
- What age do you start?

THRESHOLD

- What is the dimmest light that is perceived at a set # of point in the periphery
- “Some may be bright and some might be very dim”
- Stair step
- Generally ordered for diseases
Common Screenings

“Routine Screening”
- FDT screening
- Humphrey C-40

“Other Screenings”
- FF 120 (stroke, neuro, or just a larger view)
  - HAVE to remove lens holder!
- Superior or Bleph (used to determine eligibility for lid surgery)
  - Taped AND Untaped
73 yr old Caucasian Male

Cc: My glasses aren’t strong enough

Diabetic/Htn

Without considering VF…overall eye health fine

Optic nerve were slightly pale, but without VF?

Scan Daryl’s FDT
50 yr old Caucasian Male

VERY healthy

Severe HA

Dizziness

Eye health looked fine

Ordered FF 120

Sent him off ASAP to ER

Scan M.M. VF here
Bleph Screening Case Report

- 60 yr old Native American female
- Newly divorced
- Says she has to “strain to hold eyes open”
- Need objective measurement to determine 3rd party eligibility
- Insert scan of taped/untaped K.S. VF here
“SWAP” – yellow background, blue stimulus (early Glc)

SITA – faster algorithm

SITA Fast- fastest*, uses a faster testing strategy

Normally want to do same test as before
More VF Th Tips

- Make sure lenses are aligned together
- Adjust lens holder close to eye
- If lids are droopy, tape
- Tell them it will take longer if they look around (nicely)
- “Blanks” sometimes
Misc. VF Thresholds

- 10-2
  - Use primarily for macular disease
  - Side effect of Meds
  - AMD

- 30-2
  - Some Drs use when they suspect damage further out
  - Idiopathic Intracranial Hypertension
38 yr old male

Daily HAs

Severe, but short lasting

Temporal area of one side

Visual Fields are very important in patients’ with C/C HA!!
Can always input automatically
Can use contact lens in many cases
Remember FDT doesn’t need <7D
Lens holder close
Remove lenses for FF after prompting
Manual Calculation of Lens

Calculate the reading lens manually from the following formula:

- Use full spherical correction.
- Use the full cylindrical correction if the participant has +1.00 D or more of cylinder.

Add the following age-related plus sphere to this modified refraction:

<table>
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<tr>
<th>Age</th>
<th>Spherical Add in Diopters</th>
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<tbody>
<tr>
<td>30-39</td>
<td>+1.00</td>
</tr>
<tr>
<td>40-44</td>
<td>+1.50</td>
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<td>+2.50</td>
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<tr>
<td>55-59</td>
<td>+3.00</td>
</tr>
<tr>
<td>60+</td>
<td>+3.25</td>
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</table>
WHAT MAKES A VF RELIABLE?

(A.K.A...one that you don’t have to repeat!!)
Reliability

- Correct trial lens
- Correct test- (the one the Dr wanted)
- One eye WAS patched
- Fixation Losses <20%
- False Positives <5%
- False Negatives <9%
- Age & length of test

Miscellaneous

- FDT- if the entire screen goes dark
- Keep extra bulbs around
- Calibrate the touch screen on Humphrey
- Sometimes you have to talk the patient thru test, “Halfway Done!”
Case Report

- 10 yr old Native American girl
- Cc: Headaches
- Rx +0.25-0.50x90 OU
- Too Young for FDT?
So next time you are “banished”
Remember the WHY!

- Early detection
- Early treatment
- Preserving vision
- Improving quality of life
- In some cases, life threatening
- Because, I said so!
QUESTIONS?

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