Long standing visual neglect solved with VT

PAMELA CHINCHILLA OD,CVT,PVT
KISS Jan 2020

Initial Assessment

- Initial assessment Aug 06, 2018
- 51 y/o female
- No previous Rx, other than cheaters for near work

- Chief complaint:
  - March 28/18 on vacation she slipped on marble bathroom floor, cracked her left elbow, hit back of head. Lots of pain.
  - Came home and went back to work, not very successful, struggled.
  - Diagnosed concussion
  - A CT scan at hospital

- Tried Meditation, Cranial Massage and Physiotherapy
- Problems with fosusing, memeory. Takes 3 times longer to do her work
- Clumsy, two more falls after initial concussion, light sensitivity specially to bright flashes of light ...the sensitivity has gotten better, nauseous (a lot), gets sweats (from lights), anxiety
- Physiotherapist has attempt visual work and it didn't work because she was throwing up.

Visual Findings

- Distance acuity (habitual) 20/20 OD, OS, and OU
- Distance Ret (#4) : OD: +1.00 -0.75 x 173

  OS: +1.00 -0.75 x 170
- Subjective (#7): OD: +0.25 Add: OD: +2.50

  OS: +0.25 OS: +2.50

- Cover test:
  - Distance: ortho Near: 4xp
- Vergences: (nauseated)
  - D: BO x/18/2 BI: x/12/2
  - N: BO suppression BI: suppression
- Amplitude: Normal OU
- Confrontational fields: **full OU**
- NPC: receded/ nauseated
- Versions: **S**: tearing up/difficult/loses it. **P**: difficult

- Focusing: Lag +2.50
- Focusing Flexibility:
  - (PRA): +1.50
  - (NRA): -1.25
- Stereopsis: 20 sec/arc
- Sensory Fusion: (Worth 4 dot)
  - Distance and near: fusion
  - Under stress: No change with +/-, diplopia with push up

- Keystone makes her feel ill, Vasovagal
- Von Graefe : D: ortho N:10 exo
- FCC: +2.50
- Pupils: ERRLA @ Light/dark/direc/consensual
- Color vision: Ishihara OD 16/16 OS 16/16
- IOP: @ 10:40 OD:18 OS: 18

Functional Vision Evaluation

- On September 12, 2018 patient had a Functional Vision Evaluation she was diagnosed with:
  - Convergence insufficiency
  - Deficits Pursuits and Saccades
  - Suppression
  - Diplopia
  - Visual Midline Shift

- Optometric findings: same as above
- DEM: < 1st percentile. Performing this test makes her sweat.
- ReadAlizer: Grade Level for tracking 4.9
- Wold Sentence Copy: Below average
- Laterality & Directionality: Average
- Motor Visual Perceptual Testing (MVPT): Average
- Groffman: Unable to asses due to nausea when looking at it

- Focal and ambient shift towards the left
- Van Orden Star: (VOS)
  - Patients VOS showed poor organization with eso projection. There was incomplete closure of the left side.
- Rx was given: OD: +0.25 add +2.50

  OS: +0.25 add +2.50

Vision Therapy was started on Oct 11/18

- Patient very symptomatic, light sensitivity and nausea.
- Started with Collier's Graunding Aactivity (CGA) seating, because laying down makes her feel very wobbly.
- Syntonics: On goggles
  - Upsilon-Omega-D
  - Mu-Upsilon

- Any eye movement activity was too much for her, even laying down. Easier towards the left than the right, up-down was almost imposible
- Slowly able to move her to the floor for CGA, but eyes open. By November, able to do it with eyes close, plus Mu (syntonics) on top of her eyes
- By Dec 06/18 patient reported “she is feeling she is awaking the right side, still prefers the movement towards the left side” when doing eye movement activities

- Dec 13/19
- Work with slap-tap with good success, send this activity as homework.
- Attempt to use door jamb saccades: not able to do it, patient reported that towards her right side she sees a black line that does not allow her to read.
- = VF

NAME: Barnes, Mary
ID:

BOTH
DOB: 04-24-1966 (49)

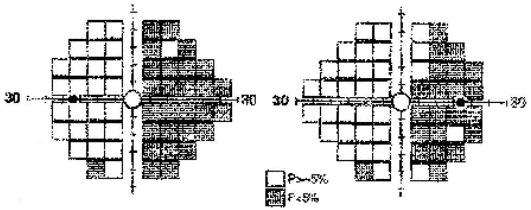
24-2-5 FDT Screening

DATE: 12-13-2012 12:59 PM

TEST SPEED: NORMAL

LEFT EYE	RIGHT EYE
PUPIL DIAMETER: VISUAL ACUITY: RX:	PUPIL DIAMETER: VISUAL ACUITY: RX:

TOTAL DEVIATION



TEST DURATION: 2:11	TEST DURATION: 2:06
FIXATION TARGET: Central	FIXATION TARGET: Central
FIXATION ERRS: 7/40 (70 %)*	FIXATION ERRS: 0/10 (0 %)
FALSE POS ERRS: 0/10 (0 %)	FALSE POS ERRS: 0/10 (0 %)

NOTES:

NOTES:

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2680 Appleby Line
Burlington, Ont
L7L 6M8
Tel 905-319-7288

SW: M02.03.01[2
807.02.01[0]
PGT.02.03[0]
FD: 35809.20081210632 (51)

Humphrey Matrix with
Welch Allyn Frequency Doubling Technology

[redacted]

- On Dec 28 patient reported a bad pressure HA since Dec 23, on the 27th had a 4h nose bleed that end up with a big blood clot, after that HA was a lot less …..
- Also patient reported that any uncomfortable issue, pressure, etc is on the right side.
- Jan 03/19 repeated VF because of fixation error of the 1st one, also b/c patient felt was not seeing fixation targets very well while doing the test.
- Also, reported the black line is not so obvious anymore.

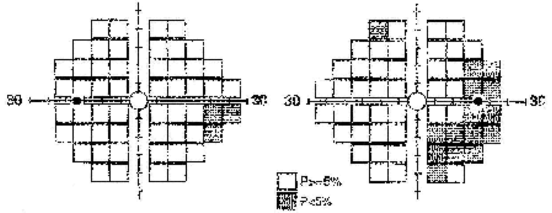
NAME: Barnes, Mary BOTH
ID: DOB: 04-24-1966 [50]

24-2-5 FDT Screening DATE: 01-03-2019 1:02 PM

TEST SPEED: NORMAL

LEFT EYE	RIGHT EYE
PUPIL DIAMETER:	PUPIL DIAMETER:
VISUAL ACUITY:	VISUAL ACUITY:
RX:	RX:

TOTAL DEVIATION



LEFT EYE		RIGHT EYE	
TEST DURATION:	1:46	TEST DURATION:	2:05
FIXATION TARGET:	Central	FIXATION TARGET:	Central
FIXATION ERRS:	0/10 (0 %)	FIXATION ERRS:	0/10 (0 %)
FALSE POS ERRS:	0/10 (0 %)	FALSE POS ERRS:	0/10 (0 %)

NOTES:

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- Since Jan 10/19 started working with eye control with patient standing, grounding/rooting her first. (Before was only able to do it seated)
- Able to do it, with much less difficulty, encourage the use of her periphery
- At that point we were able to work with ball games as well
- Work with looking hard/soft. Looking hard, elicited her sweating “clammy”

- Kept increasing difficulties and continue moving through activities, by Feb 21/19 patient started working with Line tracing activities without feeling nauseated !!!
- Got SILO on mental (-)
- First follow up with Optometrist on April 11/19
- Main findings are as follow:

First Follow up (April 11/19)

- Patient now can read 3-4 pages of a book, before could not get through 1. Still gets HA and neckaches when she overdoes it
- Computer work is more difficult than reading, written or type print
- At Cranial Therapy, she feels pain coming around and at the bottom/top of OD, nothing from OS

- Cover test:
  - Distance: ortho Near: 4xp
- Vergences: (not nauseated **any more)**
  - D: BO x/**20**/2 BI: x/**14**/**4**
  - N: BO supp**/12/-6** BI: supp**/12/ supp**
- Amplitude: Normal OU
- Confrontational fields: **full OU**
- NPC: recede/nauseated. **Better closer...get's about 10"**
- Versions: **S**: tear/diffi/loses it. **Good P**: difficult. **Good**

- Focusing: Lag +2.50
- Focusing Flexibility:
  - PRA +1.50
  - NRA -1.25
- Stereopsis: 20 sec/arc
- Sensory Fusion: (Worth 4 dot)
  - Distance and near: **Diplopia, the distance @ bottom circle change, when crossing legs in either direction.**

- Keystone makes her feel ill, vasovagal
- Von Graefe : D: ortho N 10 exo
- FCC: +2.50
- Pupils: ERRLA @ Light/dark/direc/consensual
- Color vision: Ishihara OD 16/16 OS 16/16
- IOP: @ 10:40 OD:18 OS: 18
- **Note: suppression of OD on/off during vergence testing**

Results/Plan

- Patient is suppressing OD intermittently, so when doing near work she is mainly using her OS, which will affect focusing and endurance. When using rea/green (Luster) filter, she has double vision at distance and near.
- Convergence Insufficiency….. **improving**

Continued with VT

- On April 18/19 patient was diagnosed with Fibromyalgia, which explained many things for her, but also depressed her very much.
- VT continued with regular activities.
- Coin circles, Monocula accommodarion rock (MAR), line tracing, puzzles, Physiological diplopia hard to see the 2 pens at near, when looking far.

- On May 09/19 patient needed reinforcement on saccades, because still having difficulties when reading, and eye movements, so we restarted Door jamb saccades at the office and for homework, even though she still has trouble to the right.
- May 16th patient having problem with centering
  - Not always able to see SILO. (Mental minus)
  - Space awareness is an issue, work with Estimated distance and Dimensions.
- MAR, is very different from one eye than the other.

May 23/19

- Patient arrived early because she could not wait to share the news with me. Since 2 days before, the black line that was not allowing her to see to the right side has disappeared while doing Door Jamb Saccades.
- “I can see, is not black anymore”

NAME: Barnes, Mary
ID:

BOTH
DOB. 04-24-1968 [51]

24-2-5 FDT Screening

DATE: 05-23-2019 12:51 PM

TEST SPEED: NORMAL

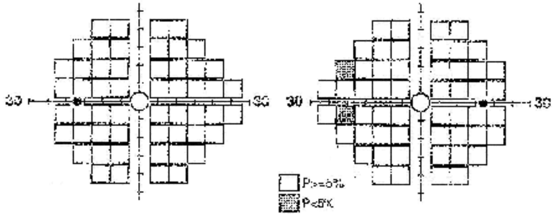
LEFT EYE

PUPIL DIAMETER:
VISUAL ACUITY:
RX:

RIGHT EYE

PUPIL DIAMETER:
VISUAL ACUITY:
RX:

TOTAL DEVIATION



TEST DURATION: 1:55
FIXATION TARGET: Central
FIXATION ERRS: 0/10 (0 %)
FALSE POS ERRS: 0/10 (0 %)

TEST DURATION: 1:14
FIXATION TARGET: Central
FIXATION ERRS: 0/10 (0 %)
FALSE POS ERRS: 0/10 (0 %)

NOTES:

NOTES:

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SW: V05.03.01[0]
S07.02.01[0]
P07.02.01[0]
TID: 37667.2008121062? (R1)

Humphrey Matrix with
Welch Allyn Frequency Doubling Technology

Continued with VT

- May 30/19, work with physiological diplopia, able to see 2 pens at every distance, plus noticed the misalignment of the pens, if head tilted.
- On the sessions to followed work regular activities and moved to more bi-ocular activities. Tranaglyphs, polarizing glasses, binocular accomodation rock (BAR), Brock String, Vis a vis, MFBF.

June 27/19

- Last session for me with the patient.# 36
- Patients was considering to go back to work, feeling very confident, able to read and retained information.
- Patient continued with her therapy until session # 40

Exit exam (April 11/19)

- No change on refraction or prescription

  Vergences: (nauseated) **not any more**

  - D: BO x/**22**/2 BI: x/**14/4**
  - N: BO **x/24/-1** BI: **x/12/ 16**
- NPC: **TTN ….. Still holding breath**
- **Von Graefe: D: 2exo N: thru add: 12 exo**

Additional notes

- Able to converge effortlessly and easily. Convergence Insufficiency resolved.
- Due to convergence ability she no longer has double vision on the Worth 4 Dot (flat fusion) testing at distance and near.
- Able to stress and relax her focusing system without having diplopia. This is a big improvement from first progress check.

Additional notes

- Visual field defect has been resolved.
- Latest Visual Field Testing has determined that the field defect is no longer there and patient is noticing improvements in driving and mobility due to her expanded visual field.

CONCLUSIONS

- Always run a VFT for ABI/TBI patients.
- Confrontational fields are not necessary the best diagnostic tool
- Is never too late to treat a VF inattention/neglect. No matter how many years has pass.
- Customized the VT for the condition and the stage of the patient

- Never be afraid to go back and re-start with the basics in VT, even though the patient has been for several months into therapy
- Listen to patients changing symptoms
- Always set the direction you want to go and the goals the patient want to achieve and work towards it
- No matter what is the diagnosis you always can help the patiente to use the visual system more efficiently

Thank you