Module 10: Summary

Presented by Amy Thomas, OD, FCOVD

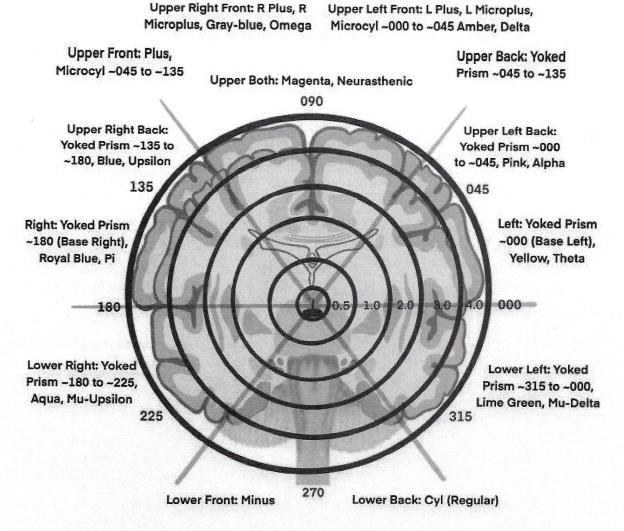
- Techniques to determine best brain region(s)
- Blind Snap Test
 - Posture Changes
 - Vibration Changes
 - Gaze Changes
 - Color Changes
 - Activity Changes
 - Blind Snap Test Posture changes

General Testing:

- Takes less than a few minutes
- Helps find area of the brain that needs stimulation
- Helps discover other imbalances that could be occurring with emotions and organs
- Have patient touch your hand
 - Very important that they do not swoop, swish, or fish for the target
- Posture Changes:
 - Quick and easy
 - Works best with cooperative patients
 - Pain on movements can skew results
- Blind Snap Test Posture changes
 - Shifting posture shifts eyes, ears, attention
- Blind snap test vibration changes
 - Vibration
 - On contralateral body
 - IE: if testing right brain, vibrate left arm
 - Added bonus if audible
- Blind snap test gaze changes

- Eye gaze
 - Patient to look at opposite field then close eyes
 - IE: if testing right brain patient gazes into left field
 - Great for paralyzed patients
 - Need to ensure that they continue to look in that gaze can usually see direction of eyes under lids
- Blind snap test changing colors
 - Testing with different colors
 - Colors
 - Green inferior
 - Purple superior
 - Blue right
 - Yellow left
 - Great for patients who cannot change posture easily
 - Quicker than trying every color
 - Blind snap test changing activities
 - Cognitive multitasking
 - Activities
 - Activate right = space, tone "Doe a Deer, a Female Deer"
 - Activate left = time Count to rhythm
 - NOTE: Speech skews to left brain
 - Procedure
 - Find the area that needs the most stimulation
 - Best results with testing
 - Note worst areas = "mine fields" avoid those
 - Find the lens on the map that corresponds to that area
 - If testing is not completely better, add another lens
 - Think about the function/network that is down (more to follow)

Proposed Lens map



Lower Both: Yoked Prism ~225 to ~315, Green, Mu

Center: Nonyoked Base in Prism

Note: Occlusion Blocks the Corresponding Brain Region (ie: Right Nasal Occlusion Blocks Lower Right Brain)



- Designed through intensive study and trial and error
- Please keep this handout nearby when testing
- Please let us know of any patterns that you find on yourselves
- Lower right brain

Lower Right Brain

Includes right basal ganglia, amygdala, hippocampus, cerebellum, also right inferior oblique, left superior rectus (can help cause extorsion of right eye and intorsion of left eye – great for cyclotorsion cases)

- 1. Cylinder
 - a. Ipsilateral with the rule (WTR) affects upper body more
 - b. Contralateral against the rule (ATR) affects lower body more
- 2. Prism: Yoked base down to the right
 - a. 0.5pd = provides more neck support
 - b. 1.0pd = more dopamine support
 - c. 2.0pd to 4.0pd = decrease significant head tilt to right, right head turn; Used more for patients with little awareness of their environment; More than 4.0pd causes "disbelief" because it is too far from reality (ok in therapy for quick activities)
- 3. Tint: 10% aqua
- 4. Syntonics: Mu-upsilon
- 5. Activities:
 - a. Pursuits down to right, saccades up to left
 - b. Astronaut training receive ball from helper from behind left shoulder and pass to helper at right hip

Right brain

Includes right temporal lobe, right medial rectus, left lateral rectus

- 1. Prism: Yoked base right
 - a. 0.5pd = provides more neck support
 - b. 1.0pd = more dopamine support
 - c. 2.0pd to 4.0pd = decrease significant head tilt to right, right head turn; Used more for patients with little awareness of their environment; More than 4.0pd causes "disbelief" because it is too far from reality (ok in therapy for quick activities)
- 2. Tint: 10% royal blue (use rarely only those who are too impaired to do syntonics will cause disequilibrium if worn for more than a few weeks)
- 3. Syntonics: Pi
- 4. Activities:
 - a. Pursuits to right, jumps to left

- b. Astronaut training receive ball from from helper from behind left head and pass to helper on right side of head
- c. Greenwald best is chin down 30 degrees with lateral eye movements (eyes and ears parallel to floor)
- d. Yes-yes' hold thumb in front of face and gently nod head up and down while gazing at thumb (helps decrease hyperphoria)
- e. No-no's hold thumb in front of face and gently shake head left and right while gazing at thumb and tilting chin down 30 degrees

Upper right brain

Includes Right Frontal and Right Parietal

- 1. Microlens (+0.12) Ipsilateral frequently balanced with Microcyl
- 2. Prisms: Da Silva
 - a. Unilateral Regular Da Silva Protocol (1@125 OD)
 - b. Unilateral Midpoint Da Silva Protocol (1@135 OD)
 - c. Unilateral Modified Da Silva Protocol (1@155 OD)
 - d. Reverse Regular Da Silva Protocol (1@125 OD, 2@55 OS)
 - e. Reverse Modified Da Silva Protocol (1@155 OD, 2@25 OS)
- 3. Tint: 10% blue; 10% purple with microlens OD (+0.12 OD over rx)
- 4. Syntonics: Upsilon
- 5. Activities:
 - a. Tracking up to the right, saccades down to the left
 - b. Cognitive activities with spatial awareness
 - i. Parquetry
 - ii. Geoboard
 - c. Body mapping
 - d. Space estimation
- 6. Nasal occlusion right side

Upper Brain - Right and left

Includes Right Parietal and Left Parietal

- 1. Prism: Base Up drives eyes downward, causes chin to move forward, can cause hip tuck (bum in), can decrease pigeon toe
 - a. 0.5pd to 4.0pd = provides more jaw support (can push lower jaw forward), can cause flexion of core for overextended patients (exo's, no core support)
 - b. Da Silva Lenses (base up and out in each eye) usually over 2pd
 - a. If Typical, use 3/2 or 4/3 and if reversed, use 2/3 or 3/4 (larger prism is on the side where the chin pulls in head extension) this can be modified to have more or less difference between the prisms in case of a larger vertical deviation (ie: 4/2)
- 2. Tint: 10% purple
- 3. Syntonics: N-Neurasthenic
- 4. Activities:
 - a. Coin circles vertical circle
 - b. Yes-yes
 - c. Astronaut training receive ball from between legs and pass to helper above head
- 5. Binasal occlusion

Upper left brain

Includes Left Parietal and Left Frontal

- 1. Microlens (+0.12) over rx in left lens frequently balanced with astigmatism that stimulates right cerebellum (with the rule in right lens or against the rule in left lens)
- 2. Prisms: Da Silva the 1pd would be in the left lens
 - a. Unilateral Regular Da Silva Protocol (1@55 OS)
 - b. Unilateral Midpoint Da Silva Protocol (1@45 OS)
 - c. Unilateral Modified Da Silva Protocol (1@25 OS)
 - d. Regular Da Silva Protocol (2@125 OD, 1@55 OS)
 - e. Modified Da Silva Protocol (2@155 OD, 1@25 OS)
- 3. Tint: 10% amber; 10% purple with microlens OD (+0.12 OS over rx)
- 4. Syntonics: Delta
- 5. Activities:
 - a. Tracking up to the left, saccades down to the right
 - b. Cognitive activities with time awareness

- i. Metronome
- ii. Trampoline
- c. Cognitive activities with symbol recognition
 - i. Hart chart (better with metronome)
- d. Catching and throwing
- 6. Nasal occlusion left side

Left brain

Includes Left Temporal, Left medial rectus, Right lateral rectus

- 1. Prism: Yoked base right
 - a. 0.5pd = provides more neck support
 - b. 1.0pd = more dopamine support
 - c. 2.0pd to 4.0pd = decrease significant head tilt to right, right head turn; Used more for patients with little awareness of their environment; More than 4.0pd causes "disbelief" because it is too far from reality (ok in therapy for quick activities)
- 2. Tint: 10% yellow (use rarely only those who are too impaired to do syntonics will cause excessive irritability if worn for more than a few weeks)
- 3. Syntonics: Theta (Sponge Bob Color)
- 4. Activities:
 - a. Pursuits to left, jumps to right
 - b. Astronaut training receive ball from from helper from behind right head and pass to helper on left side of head
 - c. Greenwald best is chin down 30 degrees with lateral eye movements (eyes and ears parallel to floor)
 - d. Yes-yes' hold thumb in front of face and gently nod head up and down while gazing at thumb (helps decrease hyperphoria)
 - e. No-no's hold thumb in front of face and gently shake head left and right while gazing at thumb and tilting chin down 30 degrees

Lower left brain

Includes left basal ganglia, amygdala, hippocampus, left inferior oblique, right superior rectus (can help cause extorsion of left eye and intorsion of right eye)

- 1. Microcyl
 - a. Ipsilateral with the rule (WTR) affects upper body more

- b. Contralateral against the rule (ATR) affects lower body more
- 2. Prism: Yoked base down to the left
 - a. 0.5pd = provides more neck support (Crack)
 - b. 1.0pd = more dopamine support (Red Bull)
 - c. 2.0pd to 4.0pd = decrease significant head tilt to right, right head turn; Used more for patients with little awareness of their environment; More than 4.0pd causes "disbelief" because it is too far from reality (ok in therapy for quick activities)
- 3. Tint: 10% lime green
- 4. Syntonics: Mu-delta
- 5. Activities:
 - a. Pursuits down to left, saccades up to right
 - b. Astronaut training receive ball from helper from behind right shoulder and pass to helper at left hip

Lower brain

Includes basal ganglia both sides, amygdala both sides, hippocampus both sides, superior recti, both inferior recti, brain stem

- 1. Bilateral Cyl or Microcyl With the rule stimulates limbs/head/neck; Against the rule stimulates torso/core
- 2. Prism
 - a. 0.5pd = provides more neck support
 - b. 1.0pd = more dopamine support
 - c. 2.0pd to 4.0pd = decrease significant head tilt to right, right head turn; Used more for patients with little awareness of their environment; More than 4.0pd causes "disbelief" because it is too far from reality (ok in therapy for quick activities)
- 3. Tint: 10% green
- 4. Syntonics: Mu
- 5. Activities:
 - a. Midbrain
 - i. Accommodative tasks
 - ii. Cranial nerves 3,4,5
 - b. Brain Stem

- i. Posture and balance tasks
- ii. Cranial nerves 6,7,8,9,10,11,12
 - 1. Examples: Divergence (6), Facial expressions (7), Vestibulo-ocular movements (8), Swallowing (9), Gargling/Singing/Humming/Breathing (10), Shrugging (11), Tongue movements (12)
- Tips and tricks
 - Check hearing before doing this exam
 - Patient should be able to follow a conversation (even if you must raise your voice)
 - Best results are if patient has had similar hearing for the last month (has not changed their hearing aids that morning) because you are testing their hearing map – this requires time and exploration for them to calibrate
 - If not better with different postures, lenses, etc.
 - Check ears for obstructions
 - If no obstructions, try to change position of jaw
 - Have patient hold lower jaw more forward than upper
 - If still not better, switch
 - If jaw position changes results send to manual therapist to centrate jaw
 - Will need to do rest of testing with that jaw position
 - If still not better but does not have diagnosis of hearing problems
 - Think blood flow issue
 - Have them sit in Basic Da Silvas (higher prism on side that chin pulls up) – about 3/2 or 2/3 to help improve blood flow to brain
 - Will need blood flow support (regulate blood pressure, nitric oxide to vasodilate, etc)

- Tips and tricks
 - If patient likes to peek
 - Keep telling patient that they are not doing anything wrong when they miss the target, that you are just measuring what areas you can help them feel more comfortable – or help their brain mess with them less

- Cover eyes by holding your hand about 2-4cm away from their face to allow light in but block view of your hand
- Have parent watch to make sure they are not looking around your fingers

Tips and Tricks

- For those patients that hate making mistakes
 - You need to spend extra time telling them that this is not a pass/fail test, that they are supposed to miss the target every once in a while, or they would not need come to you
- For the "leprechauns"
 - Not consistent
 - Usually orient selves toward the target but aim their hand opposite
 - Stop this test when you discover this and move to auxiliary testing Hallway walk, Balance testing, Questionnaire results

Tips and tricks

- If you need to determine the next lens in the protocol
 - May need this for patients who have had poor compliance (but will be more compliant in the future), patients who must go on vacation, etc.
 - Have patient wear the lenses you/they chose at the current exam
 - Stress them posture changes, gaze changes, color changes
 - Do rest of testing with those changes to find the next lens

Warnings

- If your patient mentions fatigue or shows fatigue in the exam
 - Know that stimulating a brain region that fatigues easily can cause a lot of symptoms and disgruntled patients
 - Return to clinic earlier than one month
 - Add energy: Supplements, Red light, Infrared light, Pulsed Electromagnetic Frequency (PEMF), etc.
 - Decrease toxins: Supplements (binders, liver and kidney support), Ionic footbath, Relaxation. Etc.
 - Often, you want to do these before providing lenses
- If your patient mentions pain or shows pain in the exam

- Have them wear the lenses for a few minutes and walk around if exacerbates pain, try a different lens (esp prism – because it affects the musculoskeletal system more)
- Try to get them manual therapy (Craniosacral or Structural Energetic Therapy)
 before starting lenses

Thank you!

- You made it!
- Get comfortable with the techniques
- Ask a lot of questions bbotoolbox@gmail.com
- Visit my office
- Try for certification
 - 100-point multiple choice test
 - 5-day office visit
 - Finish the 10-point quizzes for each module
- Stay on the Facebook group for any updates or new protocols and handouts