



COLLABORATIVE CARE WITH NEUROLOGY: INCORPORATING SYNTONIC OPTOMETRY, FUNCTIONAL VISION, AND NEURO-OPTOMETRIC REHABILITATION WITH NEUROLOGY

CSO 2024

FINANCIAL DISCLOSURES

- I am a practicing neuro rehab optometrist
- Speaker for various groups and organizations
- Trustee for The College of Syntonic Optometry
- Nothing that will affect our lecture today

GOALS

- This purpose of this course is to explore the role Syntonic Optometric Phototherapy and Neuro-Optometric Rehabilitation plays in a neurological setting. It will discuss and demonstrate the benefits of collaborative care, for Optometrist and patients.
- 1. Understand Syntonic Syndromes and their roles in Optometric care
- 2. Understand the importance of Collaborative Care in Optometry
- 3. Understand the dynamics of collaborative care in Optometry
- 4. Understand other provider's roles in collaborative care
- 5. Understand the importance of role of a Syntonic Optometrist plays in Neurological diseases
- 6. Learn various techniques to incorporate into Optometric patient care
- 7. Gain insight from a Neurologist's point of view on collaborative care with an Optometrist
- 8. Have a more confident feeling to collaborate with other providers, specifically a neurologist in neuro-optometric rehabilitation
-

GRATITUDE FOR LISTENING

“Keeping your body healthy is an expression of gratitude to the whole cosmos—the trees, the clouds, everything.”

———— THICH NHAT HANH

“At times, our own light goes out and is rekindled by a spark from another person. Each of us has cause to think with deep gratitude of those who have lighted the flame within us.”

—Albert Schweitzer



Truth is one
PATHS ARE MANY
@swamisatchidananda

You see, in life, lots of people know what to do, but few people actually do what they know. Knowing is not enough! You must take action.

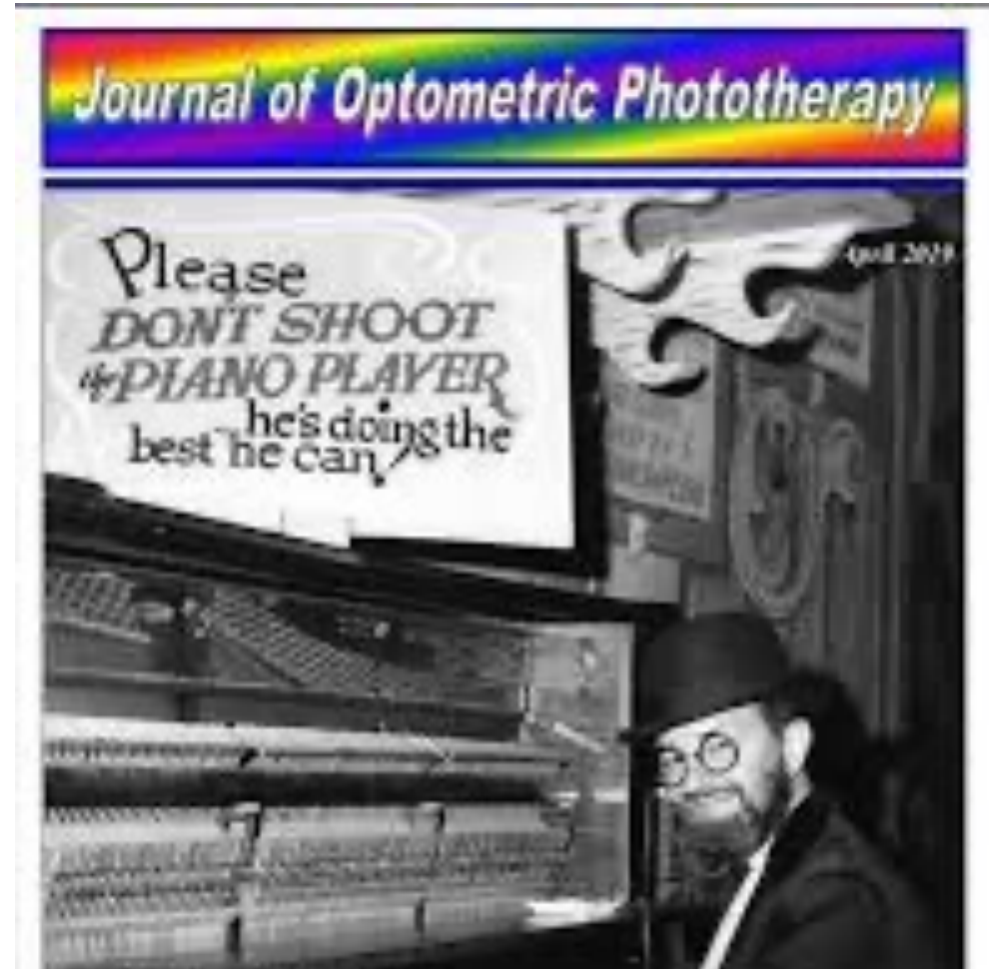
Rony Acharya

BACKGROUND

- O.D. 2006
- Fellow College of Syntonic Optometry
- Masters Cannabis Science
- Neuro-Optometric Rehabilitation and Vision Therapy
- Certified in 200H Yoga,
- Meditation,
- Life Coach (addiction/inner child trauma/ Narc abuse recovery
- Mindfulness,
- Breath Coach,
- Sound healing
- Energy Medicine
- Plant medicine
- Shaman Apprentice
- Heart Math Certification
- ½ way through Integrative Health, Wellness and Nutrition
- ½ way through Ketamine Certification
- Student at Quantum University

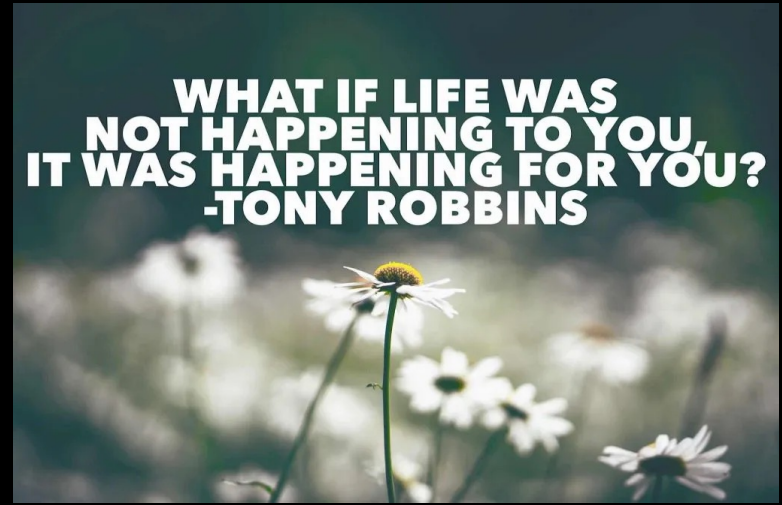
WHERE IT ALL STARTED

- I have had 3 mTBI over the past 25 years
- My first one in 2001 is what introduced me to Syntonics
- You can read about it in the 2019 Journal of Optometric Phototherapy



COLLABORATION CONTINUED

- 2013 first case of Myelitis
- Reconnection
- First CSO conference 2014
- Brought to office 2015
- Fellowship 2019
- FNORA candidate



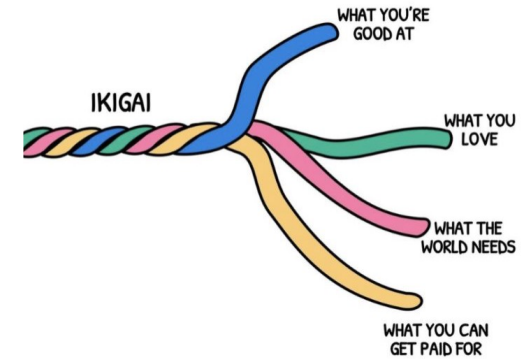
**WHAT IF LIFE WAS
NOT HAPPENING TO YOU,
IT WAS HAPPENING FOR YOU?
-TONY ROBBINS**

You, me, or nobody is gonna
hit as hard as life. But it ain't
about how hard you hit. It's
about how hard you can get
hit and keep moving forward.

SYLVESTER STALLONE

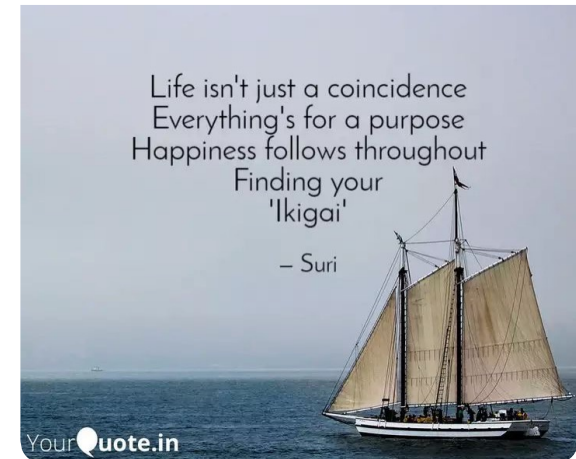
IKIGAI

- Syntonic Optometry changed my life, and it changes many of my patients' lives too
- All of my “skills” are used in the neuro clinic
- Turning pain into purpose....



Life isn't just a coincidence
Everything's for a purpose
Happiness follows throughout
Finding your
'Ikigai'

– Suri

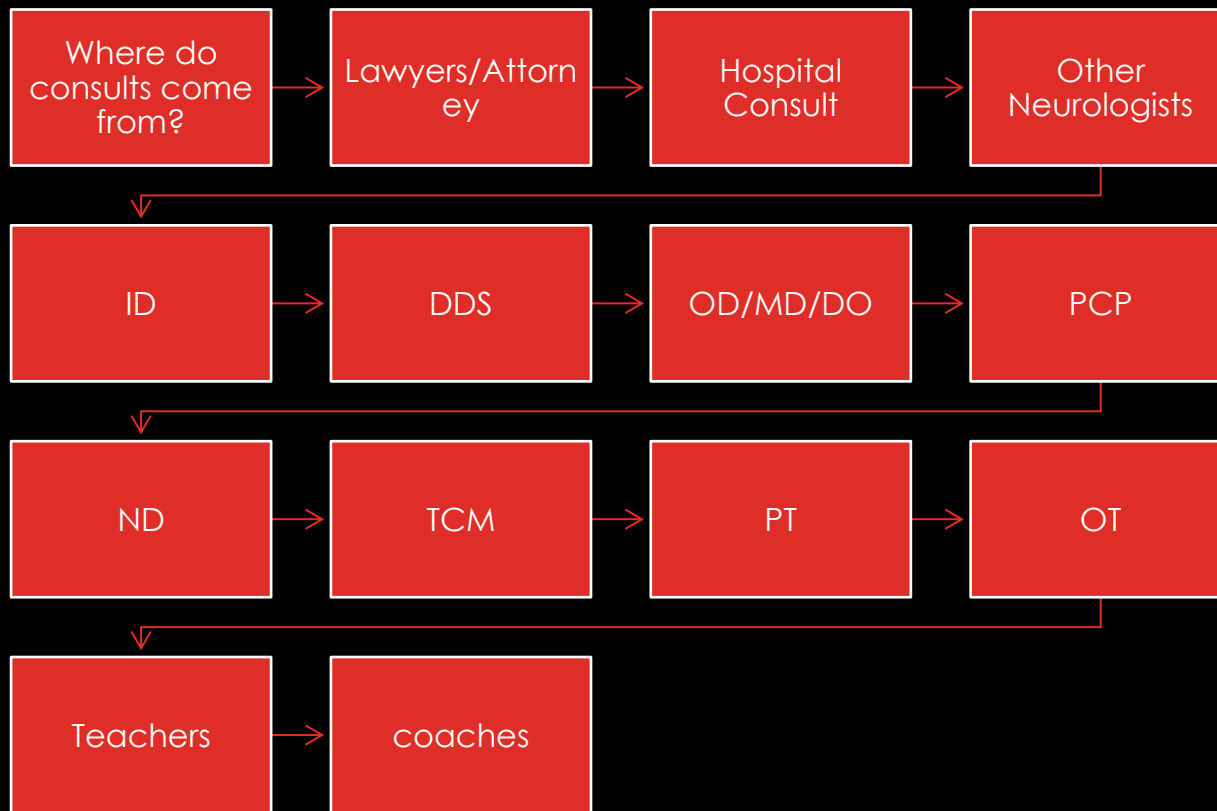


TYPICAL PATIENTS

- Not many general skills
- Not many primary care
- Concussion/Tbi
- Migraine
- Infectious Disease related
- Stroke
- Myelitis
- MS
- Nystagmus
- Tourette's
- Some Pain Co-management
- ASD



PIVOT



I GET BY
WITH A LITTLE
HELP
FROM MY
FRIENDS

-THE BEATLES

A LITTLE HELP FROM MY FRIENDS.....

- Who do I send to?
- Other OD (RF/IPL/SLS/Sensora/VEP)
- OMD
- Neurologist
- Pain Management
- PT
- OT
- Chiropractic
- Cranial Sacral
- Mayan Abdominal Massage therapist
- LMT
- Surgeons
- Dentist
- Therapist

TEAMWORK

TYPICAL EMERGENCIES

- Concussion
- Optic Neuritis
- Certain Retinal Pathology
- NION
- "Sudden onset blindness"
- "Sudden onset Diplopia"



TYPICAL PATIENT TRIAGE



- Emergency
- Follow ups
- Consults
- PBM station (migraines, TBI)
- NOR
- NOR with Syntonics



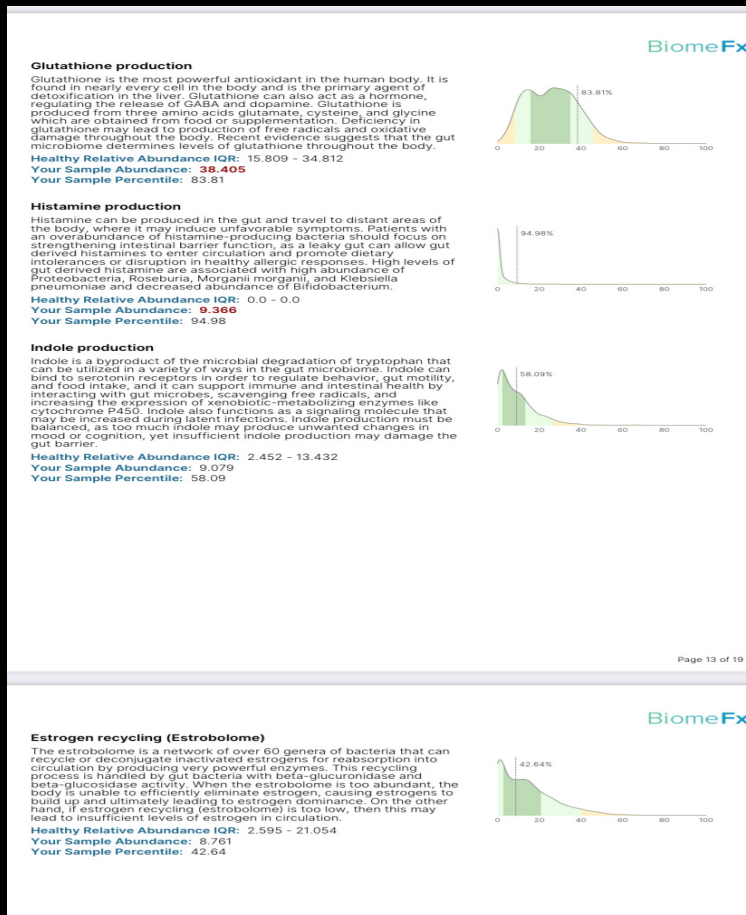
INDIVIDUALIZED TREATMENT PLAN

- Intake
- Exam
- Labs
- Collaborations (OD, cranial sacral, PT, massage, functional medicine)
- Life Style changes
- Gut Health
- Stress Assessment/Endocannabinoid System
- Nutrition Counseling
- Neuro-Optometric Rehabilitation Program
- Syntonic Optometric Phototherapy Program

TESTING

- DNA Company DNA 360
- Walsh Protocol lab
- StratGene
- Blood testing
- X-rays
- CT
- MRI
- GI gut testing
- Hormone testing
- Cortisol
- Melatonin
- HTMA (Hair tissue Analysis)

TEST EXAMPLES (FROM WEBSITE, NOT PATIENTS)



StrateGene®

Strategic Genetic Analysis

Presented by SeekingHealth®

Prepared For: FemaleHet

What you're about to uncover in these upcoming pages is extremely powerful!

You finally have the opportunity to 'peek under the hood' and see You.

By discovering your unique genetic makeup using StrateGene®, you'll learn how you can truly optimize your life.

There is no such thing as a "bad" report, or a "good" report—just unique. You won't find any 'red' or 'yellow' colors here that symbolize 'bad' or 'warning'. Instead, you'll learn that some of your genes naturally work slower and some naturally work faster. It's important that you know this information so you can adapt. If you don't know how your genes are built, you've no idea how your choices impact you.

You can change the way your genes function by changing your environment, mindset, food, and lifestyle. Your StrateGene® Report helps you make targeted choice after targeted choice which creates the optimal environment for your genes—one choice at a time. The result? You'll ultimately function at your best—and you'll know why.

Your journey to the best version of You is about to begin!

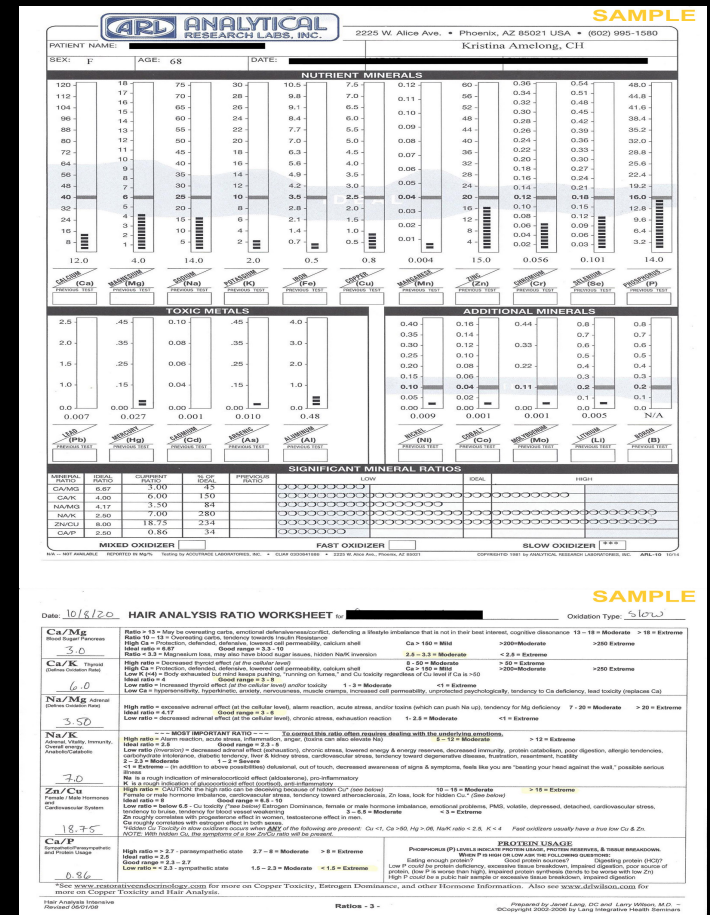
Lab Work Completed Date: 09-10-19 UTC
Specimen Collection Date: 06-22-20 UTC
Kit Type / Kit ID: Swab Kit SH1620346892

Report Date: 05-07-21 00:22:23 UTC
Report Version: StrateGene® Core v1.0 (33.3)
Report ID: FemaleHet1620346892

Go To:

[The Super Seven](#) | [Histamine](#) | [Dopamine](#) | [Serotonin](#) | [Folate](#) | [SAM](#) | [Methylation](#) | [Glutathione](#) | [Biotin](#) | [Advanced Tables](#) | [Glossary](#) | [Education](#) | [FAQ](#)

[Dirty Genes](#) | [Seeking Health](#)



DEVICES WE USE IN OFFICE



All photos taken directly from company websites

INSTRUMENTS CONTINUED

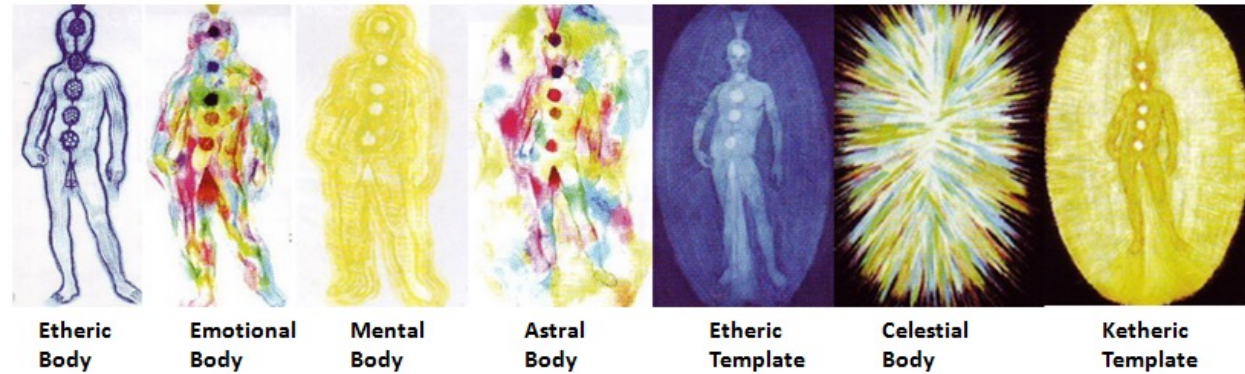


All photos taken directly from
company websites

WE ARE ALL DIFFERENT ENERGETIC BEINGS

- All patients are treated as different energetic beings

The Brennan Model of the first 7 Levels of the Human Energy Field



PHASES OF TREATMENT

- Multimodal/Multisensory Approach
- Mind
- Brain/Eyes
- Body
- Spirit



MIND

HOW TO SET *Intentions*

1. REFLECT

What values do you want to embody? What decisions will get you closer to where you want to be? How do you want to feel?

2. WRITE THEM DOWN

Writing down your intentions will help make them more tangible and puts them out in the universe to help them come to life.

3. KEEP THEM POSITIVE

Instead of setting an intention like "stress less" flip it into "be calm, relax and trust that everything will work out." Focus on the good.

4. MAKE THEM VISIBLE

Hang them up in a spot that you spend a lot of your time. Revisit them frequently so you're constantly reminded of what you're working on.

5. GIVE YOURSELF FEEDBACK

Do an "evening check" or use visual reminders throughout the day to reflect on what you're doing great on and what you need to work on.

6. HAVE FUN

Remember that this is a fun, guiding practice to help you take small steps to improving yourself each day – not perfection.

READ THE FULL ARTICLE ON

WWW.ASERENEPURSUIT.COM

- ✓ Intention
- ✓ Goal Setting
- ✓ Mantras
- ✓ Meditation
- ✓ Mindfulness
- ✓ Gratitude
- ✓ Life coaching/Therapy

GOAL VS INTENTION

- Goals: Specific/Measurable
give direction and structure
- Intention: Underlying
purpose and motivation

Goals VS	Intention
Come from the head	Come from the heart
Outside in	Inside out
focus on a destination	focus on the journey
say, "I know the way"	say, "I know my values"
focus on the future	focus on the present
focus on short-term gain	focus on long-term growth
about execution	about experimentation

AFFIRMATIONS/MANTRAS



- Thanks to neuroplasticity, affirmations and mantras are helpful for reprogramming the brain
- There is MRI evidence that suggests that certain neural pathways are increased when people practice self-affirmation tasks, such as repeating positive affirmations daily (Cascio et al., 2016).



Headspace
Thrive
Calm
Insight Timer
Liberate
Smiling Mind
MyLife
Meditation



MEDITATION/MINDFULNESS

GRATITUDE

- “Gratitude were associated with better cognitive function among older adults.”
- •Gratitude were associated with larger volumes of amygdala and fusiform gyrus.
- •Amygdala mediated the association between gratitude and a cognitive function.”
- <https://www.sciencedirect.com/science/article/abs/pii/S0167494322000267>

Gratitude Journal

DATE: _____

How I am Feeling Today _____

Things I am Grateful Today _____

Daily Affirmations _____

Notes _____

Mood Drawing _____

Habit Tracker

	Yes	No
_____	<input type="radio"/>	<input type="radio"/>
_____	<input type="radio"/>	<input type="radio"/>
_____	<input type="radio"/>	<input type="radio"/>
_____	<input type="radio"/>	<input type="radio"/>
_____	<input type="radio"/>	<input type="radio"/>

Things that Make Me Smile _____



Date _____

GRATITUDE JOURNAL

I felt _____ The weather was _____

The three things I am grateful for today are _____

The best thing about today _____

Today I learned _____ Today I helped _____





BODY

- Somatic Body work
- Yoga
- Lifestyle Changes
- Nutrition
- Gut Health
- Endocannabinoid System
- Detox

SOMATIC BODY WORK

Body awareness

Identifying bodily tensions and recognizing what calms them.

Pendulation

Following guided therapy to experience and release traumatic emotions.

Resourcing

Recognizing what makes them feel good and safe to find emotional balance and peace.



Techniques Used in Somatic Therapy

Grounding

Feeling the energy from the ground by connecting your body and the earth.

Titration

Observing changes in the body while processing traumatic memory with a therapist.

Sequencing

Attending to the order in which sensations leave the body and what follows.



GROUNDING/EARTHING

- Fascinating research!!
- The Effect of Earthing Mat on Stress-Induced Anxiety-like Behavior and Neuroendocrine Changes in the Rat



3-Part Grounding

1. Pay attention to the part(s) of you touching the ground
2. Focus on how your inhale and exhale fills and empties the diaphragm/stomach/chest area
3. Imagine breathing up from the ground, drawing energy up through your body as you grow taller.

Repeat as needed.

www.newtides.ca

BREATHWORK

- “Breathing, it’s so easy, you don’t need to buy a bunch of equipment to do it, you can just train yourself to breathe in a healthier way.” —James Nestor

"Structured Breathing
(Breathwork)
outperformed meditation
for improving mood,
autonomic regulation &
lowering stress around
the clock" — Dr. Andrew
Huberman

-Sam Kalawart



frustration



Appreciation

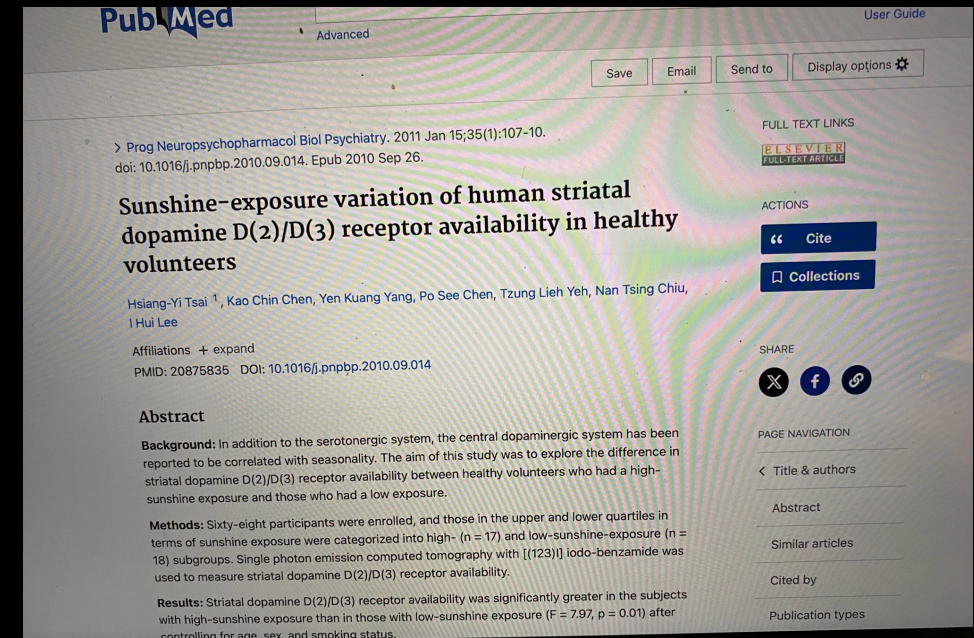
HEART MATH

HRV. Measured 250 HR x per second

Take directly from Hartmath.com

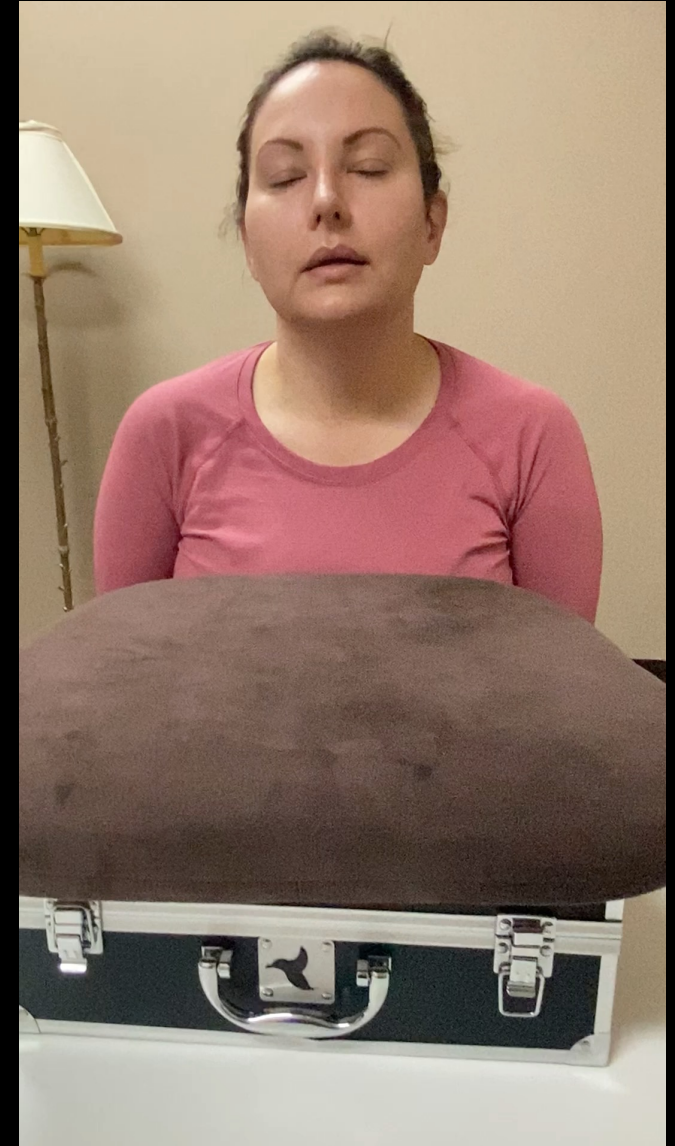
SUNNING

- “Find a spot where you can sit/stand with sunlight falling on your face. Try to do this in the early hours or late hours of the day when the sunlight doesn’t hurt your face.”
- “Sit/stand with the sunlight falling on your face for some time.”
- “When you feel ready, gently move your head from side to side. Make sure your chin is above your shoulders in each turn.”
- “Do this 8 to 10 reps and rest for 15 seconds and repeat. “



PALMING

- “**To palm is to cover** your closed eyes with your hands in such a way that there is no pressure on your eyeballs. The palms of your hands are slightly cupped over each eye (left over left and right over right), and usually the fingers are partly interlaced on your forehead.”
- “There should be no light, or as little as possible, allowed to enter the eye. Once you are palming, open your eyes and look around to see if you can adjust your hands in such a way as to exclude as much light as possible. Close your eyes.”



DETOX

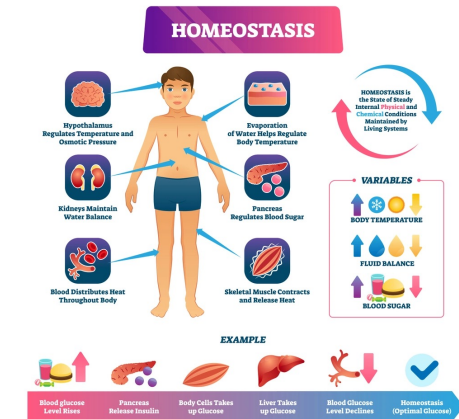
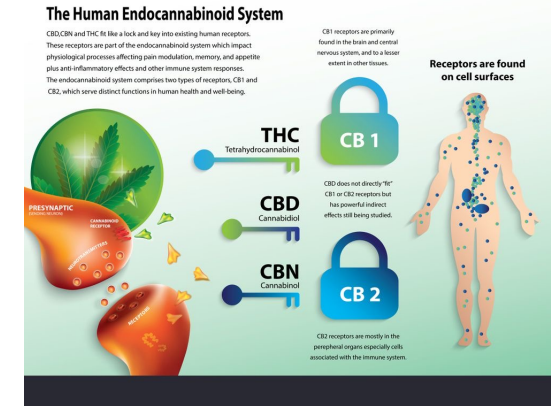
- Red light therapy (feet/stomach/liver)
- Green Light therapy (stomach /liver)
- Castor Oil packs
- Foot baths
- Sole Water
- Detox Capsule
- TCM
- Gua Sha



ENDOCANNABINOID SYSTEM

- “The endocannabinoid system has many important functions and plays a role in regulating motor control, mood, memory, appetite, pain, digestion, immune response, neural protection, bone growth, fertility, reproduction, pleasure, temperature regulation, stress response, and even memory and learning.”

- Goal: Homeostasis
- I Rx CBD/CBN/CBG/CBC
- Neurologist Rx's various cannabis strains



LIFE STYLE CHANGES

MOVEMENT

EXERCISE

SLEEP HYGIENE

BLUE LIGHT DIET

LESS EMF EXPOSURE

PLANNING AND PACING

PLANNING AND PACING

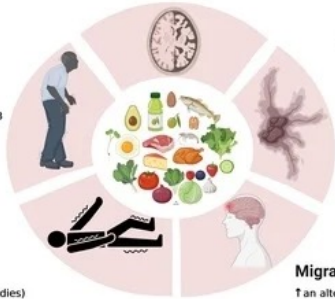
Activity	Fold Laundry	Wash Dishes	Walking	
Active Goal	10 minutes	10 minutes	20 minutes	
Rest Goal	15 minutes	5 minutes	30 minutes	
Day 1	10 min/15min	10 minutes/5 min	20/ 30 minutes	
Day 2	10 min/15min (2)			
Day 3				
Day 4				

Ketogenic Diet in the Treatment of Neurological Diseases

Alzheimer's disease (AD)
 ↓ inflammation in the brain
 ↓ brain insulin resistance
 ↑ compensation of glucose deficiency in the brain
 ↓ deposition of amyloid plaques in the hippocampus
 ↓ activation of microglia

Parkinson's disease (PD)

↓ dopaminergic neurodegeneration
 ↓ mitochondrial deficit
 ↓ death of dopaminergic neurons
 ↑ modulation of the Akt/GSK-3β/CREB signaling pathway mediated by histone acetylation of the mGluR5 promoter region



Multiple sclerosis (MS)

↑ neuroprotective effect
 ↑ BDNF synthesis
 ↓ sNfL level
 ↓ ALOX5, COX1, COX2 expression
 ↑ neural regeneration

Epilepsy

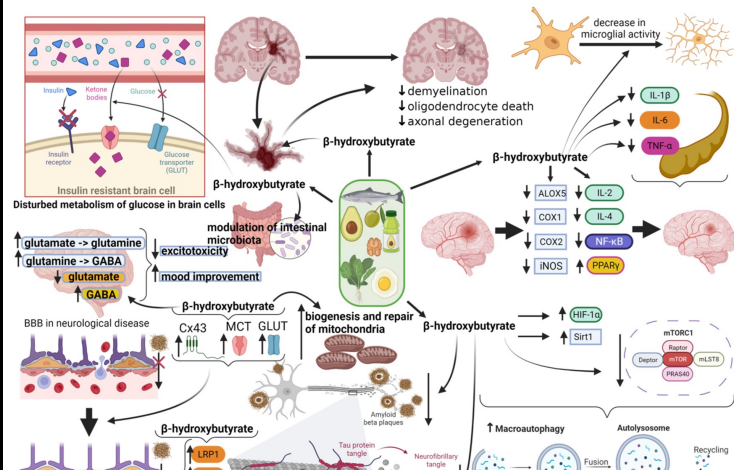
↑ anticonvulsant effect (ketone bodies)
 ↑ ability of β-hydroxybutyrate to directly activate KCNQ2/3 channels
 ↓ levels of glutamate and pro-inflammatory cytokines
 ↓ glucose availability
 ↑ synthesis of the neurotransmitter GABA and adenosine A1

Migraine

↑ an alternative source of energy for the brain
 ↑ influence on disturbed metabolism of brain cells

↓ ArcRc inhibits voltage-dependent Ca²⁺ channels (VDCC) and reduces EPSC

Potential mechanisms of ketogenic diet effect in neurological diseases



NUTRITION

- Mediterranean Diet
- Ketogenic Diet
- True Plant Based diet
- IF
- Increase clean healthy water
- Wahl's Protocol
- Cutting back sugar
- Decreasing or limited Alcohol

YOU ARE WHAT YOU EAT..



Review > Mol Neurobiol. 2011 Oct;44(2):142-59. doi: 10.1007/s12035-011-8168-2.
Epub 2011 Mar 1.

Neuroprotection by spice-derived nutraceuticals: are what you eat!

Ramaswamy Kannappan ¹, Subash Chandra Gupta, Ji Hye Kim, Simone Reuter,
Bharat Bhushan Aggarwal

Affiliations + expand

PMID: 21360003 PMCID: PMC3183139 DOI: 10.1007/s12035-011-8168-2

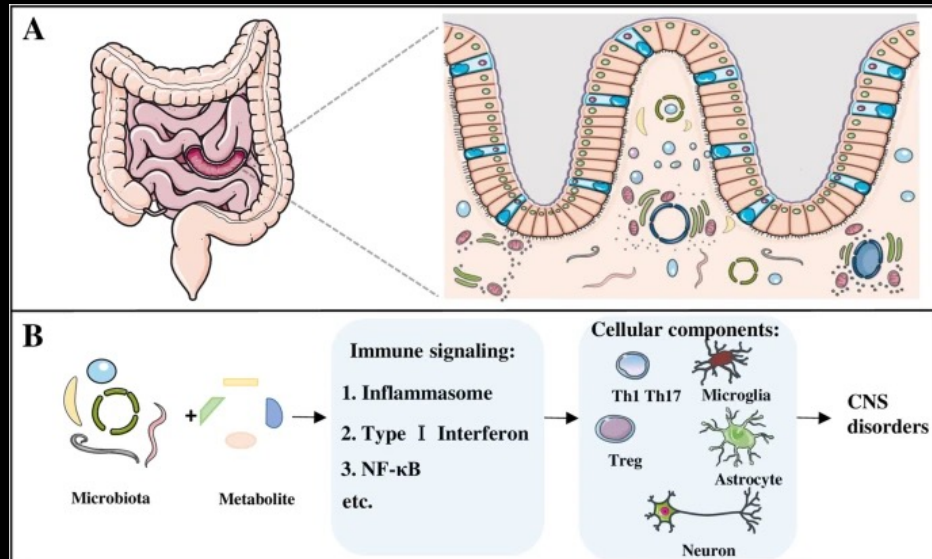
Abstract

Numerous lines of evidence indicate that chronic inflammation plays a major role in the development of various neurodegenerative diseases, including Alzheimer's disease, Parkinson's disease, multiple sclerosis, brain tumor, and meningitis. Why these diseases are more common among people from some countries than others is not fully understood, but lifestyle factors have been linked to the development of neurodegenerative diseases. For example, the incidence of certain neurodegenerative diseases among people living in the Asian subcontinent, where people regularly consume spices, is much lower than in countries of the western world. Extensive research over the last 10 years has indicated that nutraceuticals derived from such spices as turmeric, black pepper, black pepper, licorice, clove, ginger, garlic, coriander, and cinnamon target inflammatory pathways, thereby may prevent neurodegenerative diseases. How these nutraceuticals modulate various pathways and how they exert neuroprotection are the focus of this review.

PubMed Disclaimer

GUT HEALTH... WHY SHOULD I CARE?

“Disruption of hemostasis in gut microbiota can lead to the alternations in CNS, resulting in the progression of various CNS disorders”



GUT-BRAIN AXIS

- The vagus nerve is an essential part of the brain–gut axis and plays an important role in the modulation of inflammation, the maintenance of intestinal homeostasis, and the regulation of food intake, satiety, and energy homeostasis.
- Vagus Nerve stimulation:
 - Chanting Deep breathing
 - Singing Gut Health
 - Humming
 - Gargling



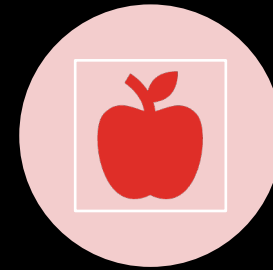
GUT HEALTH
TESTING



FECAL
TESTING



MICROBIOME
TESTING



DIETARY
CHANGES

<https://www.frontiersin.org/journals/neuroscience/articles/10.3389/fnins.2022.1002266/full>

GUT HEALTH

SUPPLEMENTS

NAC (Seeking Health/Life Extension)

Spore Based Probiotic/Prebiotic (microbiome lab/Seed/Pendulum)

Digestive Enzymes. (Thorne/microbiome lab/life extension

Liposomal Vitamin C (Thorne/Dr. Mercola/Seeking Health)

Liposomal glutathione (Thorne/Dr. Mercola/Seeking health)

DHA (Seeking Health/ Nordic Naturals)

Liposomal Vit D/K (Seeking Health/Thorne)

Colostrum (Life Extension/ARMRA)

Omega (Nordic Naturals/Microbiome labs)

Mg (Jigsaw/Seeking Health)

Restore Detox (Zonia)

Differences Between the B Vitamins			
vitamin	What Does it Do?	Signs of Deficiency	It's Best to Eat
B1 (Thiamine or Thiamine)	Controls hydration and is responsible for absorption of other nutrients	Weakness, fatigue, irritability, confusion, abnormal heartbeats and poor energy concentration	Whole grain cereals, yeast, pork, poultry, seafood, rice, and legumes
B2 (Riboflavin)	Antioxidant that helps break down nutrients that may be damaging to the body	Rare. Excessive alcoholism, which hinders production of riboflavin or riboflavin deficiency, can be longer and usually results in a sore throat, swollen lips, and increased sensitivity to light, hair loss, skin rashes, and dry skin	Some dairy products, meat, for longer and usually results in a sore throat, swollen lips, and increased sensitivity to light, hair loss, skin rashes, and dry skin
B3 (Niacin)	Helps control cholesterol, supports metabolism, is important in energy production and is important in the production of DNA and RNA	Weakness, fatigue, irritability, depression and anxiety, skin rashes, and dry skin	Meat, fish, dairy, whole grains, nuts, legumes, and soy products
B5 (Pantoic acid)	Helps to maintain a healthy digestive tract and with B1 it controls cholesterol	Fatigue, weakness, numbness, tingling, and numbness, increased irritability	Found in just about every food, but a good amount is not what you need, but a good amount is not what you need
B6 (Pyridoxine)	Helps to break down proteins and carbohydrates, supports metabolism, and is important in the production of DNA and RNA	Weakness, irritability, fatigue, impaired immune function	Found in the same foods as B1 and B2
B7 (Biotin)	Helps to break down proteins, fats, carbohydrates, and proteins, glucose. Also helps produce healthy hair, skin, and nails	Not necessary to take supplements of B7	The bacteria in your intestines naturally produce biotin, but a good amount is not what you need, but a good amount is not what you need
B9 (Folate)	Helps to break down proteins, fats, carbohydrates, and proteins, glucose. Also helps produce healthy hair, skin, and nails	Not necessary to take supplements of B9	The bacteria in your intestines naturally produce biotin, but a good amount is not what you need, but a good amount is not what you need
B12 (Cyanocobalamin)	Helps to break down proteins, fats, carbohydrates, and proteins, glucose. Also helps produce healthy hair, skin, and nails	Not necessary to take supplements of B12	The bacteria in your intestines naturally produce biotin, but a good amount is not what you need, but a good amount is not what you need

Magnesium Cheat Sheet

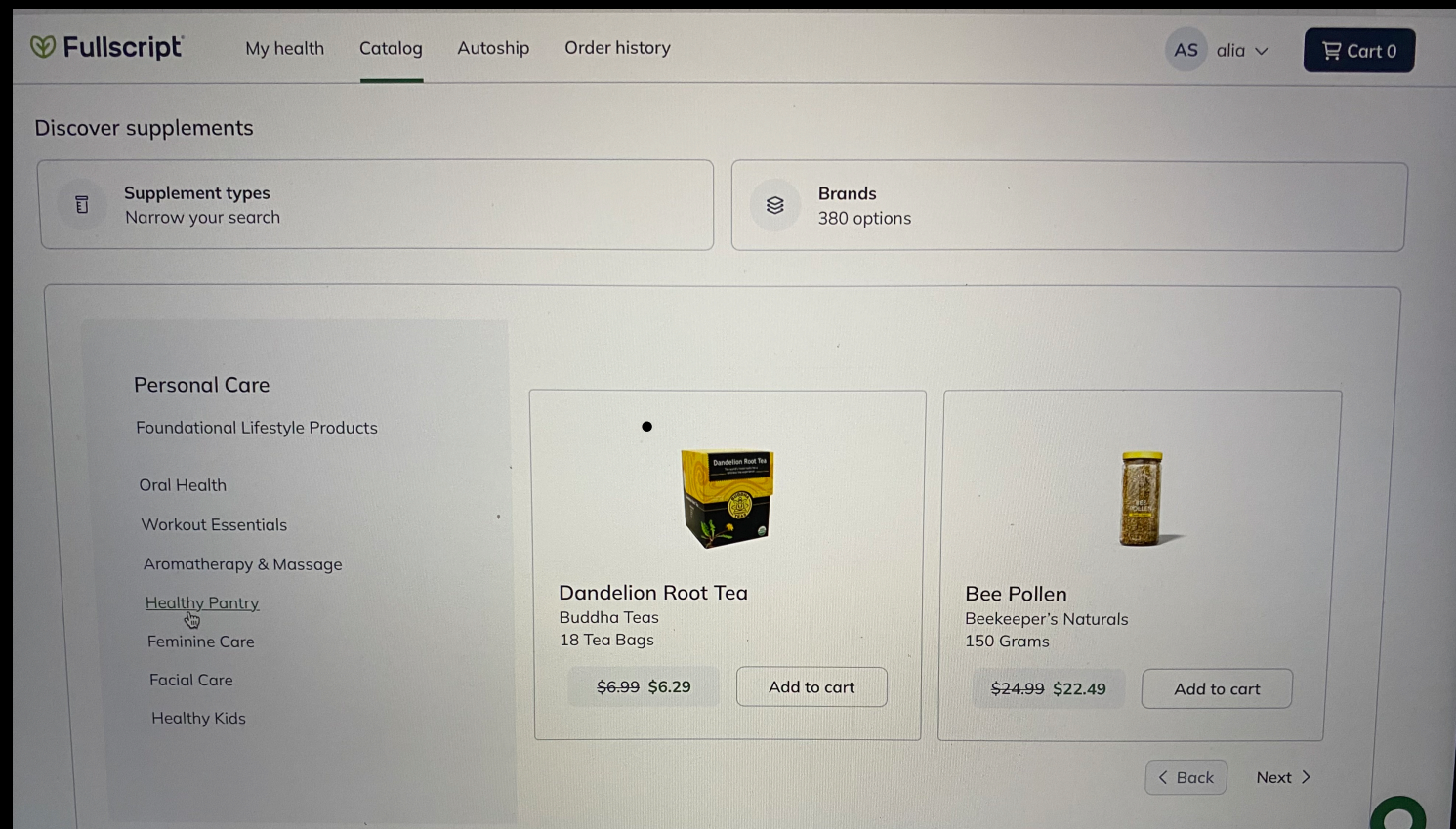
If you have...

Then you should try Magnesium...

Gut issues or muscle cramps	Chloride
Constipation	Citrate
Anxiety or insomnia	Glycinate
Fatigue or pain	Malate
Stress or inflammation	Sulfate
Brain fog or anxiety	Threonate

VITAMIN CHEAT SHEETS
TAKEN FROM FULLSCRIPTS.COM

FULLSCRIPTS



A FEW THOUGHTS



CASES

- Patient:
- 56 year old reports to clinic (s/p hospital stay)
- Blood clot in lungs
- Wheel chair bound
- Aphasia
- Computer sales
- Aneurysm with medullary stroke
- Spinal fluid infection with increased cranial pressure
- Left Side weakness



HISTORY

- Medications: Claritin, Vitamin B12, Vitamin D, Vitamin K
- Non Smoker, No alcohol
- Overall healthy, no previous injuries or surgeries (per wife)

MEDICAL BACKGROUND

- Hospital stay for 10 days, then rehabilitation hospital
- Caught Covid at Rehabilitation center
- Pt placed in medical coma 2-3 weeks
- Transferred to a different rehab hospital
- MRI (+) Medullary Stroke
- Spinal Tap (+) CNS infection

EXAM COMPLAINTS/CONCERNS

- (+) Floaters
 - (+) Diplopia (horizontal)
 - (+) Blurry vision D>>N
 - (+) Visual Fluctuations
 - (+) Lack of confidence walking
 - (+) Loss of peripheral vision
 - (+) Poor balance
 - (+) Red Eyes OS>>OD
 - (+) Eye fatigue
- (+) "jerky" eye movements

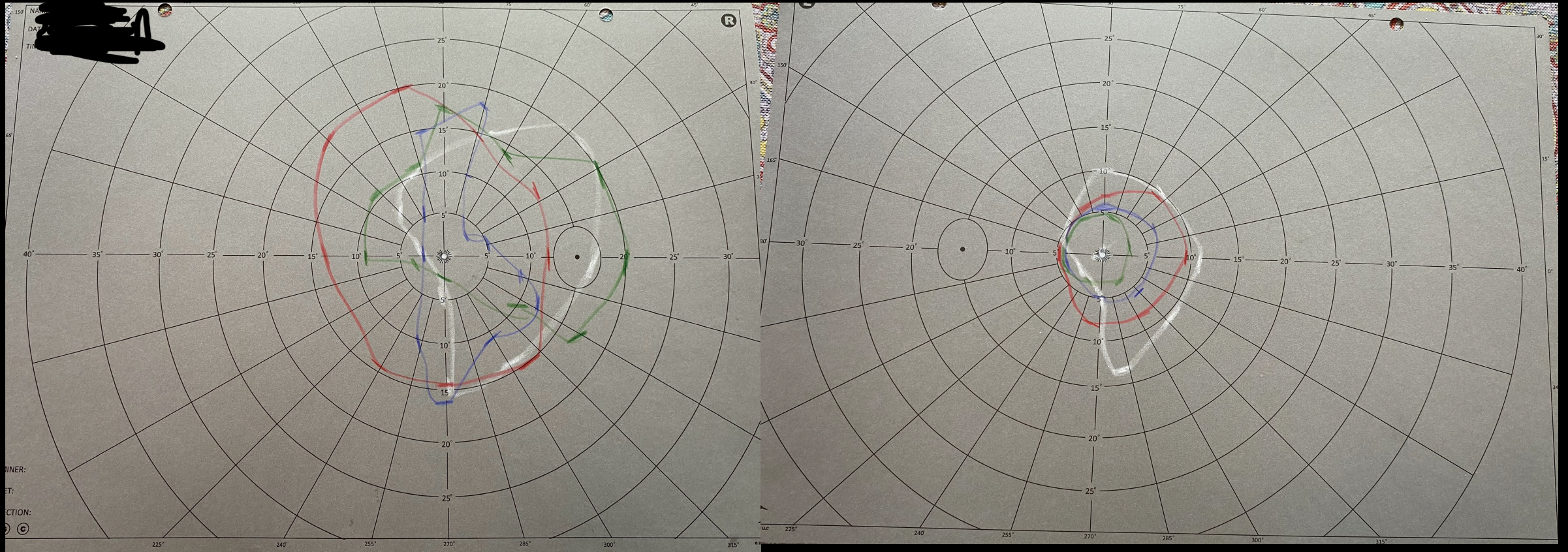
EXAM

- **Visual Assessment:**
- Unaided VA: 20/100 O.D. and 20/40 O.S.
- Pupils: PERRL (-)APD. 4mm, 4mm and 3-4+ AO OD and OS
- EOM: Full range, choppy motion. (Nausea reported with movement)
- Confrontation Fields: Distorted nasal quadrant. O.D. and O.S.
- Color Vision: 12/12 O.D., O.S. (color vision made easy)
- Ocular health: DES with MGD IOP: 18/18 DFE: unremarkable, (-)pallor (-)neurological defects
- Retinoscopy: -3.00 O.D. and -1.25 O.S.
- Subjective (Distance). O.D. -2.75 DS +1.50 VA 20/20
- O.S. -1.25 DS ADD +1.50 VA 20/20
- Near VA. 20/20 O.D., O.S., O.U.
- Final: O.D. -2.75 +1.50 DS 1BD VA 20/20
- O.S. -1.25 +1.50 DS 1BD VA 20/20

BINOCULAR FINDINGS

- **Binocular Findings**
- Distance Vergences. BI x/12/0 BO x/18/8
- Near Vergences. BI X/18/4 BO X/18/8
- Cover Test. Ortho distance. 6XP'. VG Phorias: 3EP (dist). 1EP'
- NPC. X/28/35 Visual Midline Shift: up and to the right
- W4D. 3-4 dots near, far. Full room illumination and dark
- NRA/PRA. +2.25/-0.75 Stereo: 60" Randot
- Pursuits : 1/1/1/1 Saccades: 1/1/1/1 (NSUCO)(A/A/HM/BM)
- Pursuits and Saccades made him feel uneasy
- Prism: Noted immediate results with 1BD yoked
- Occlusion: Preferred Binasal occlusion
- Did not like tints

INITIAL FIELDS



ASSESSMENT/PLAN

- **Assessment**
- Convergence Insufficiency, Generalized Contraction of Visual Field, Visual Midline Shift, and Abnormal Pupils
- **Plan**
- Syntonic Treatment
- CoMra Neurology protocol
- OmniPemf mat neurology protocol



TREATMENT

- Delta Omega/Mu Upsilon 20 minutes x 21 days (with visualization/mindfulness)
- Sunning/Palming
- Breathwork
- Grounding Mat daily
- CoMra Unit Neurology protocol
- Gut health protocol
- Dietary Changes
- Stroke support group/coaching

INTENTION/GOAL/VISUALIZATION

Intention: “To allow my body to heal naturally”

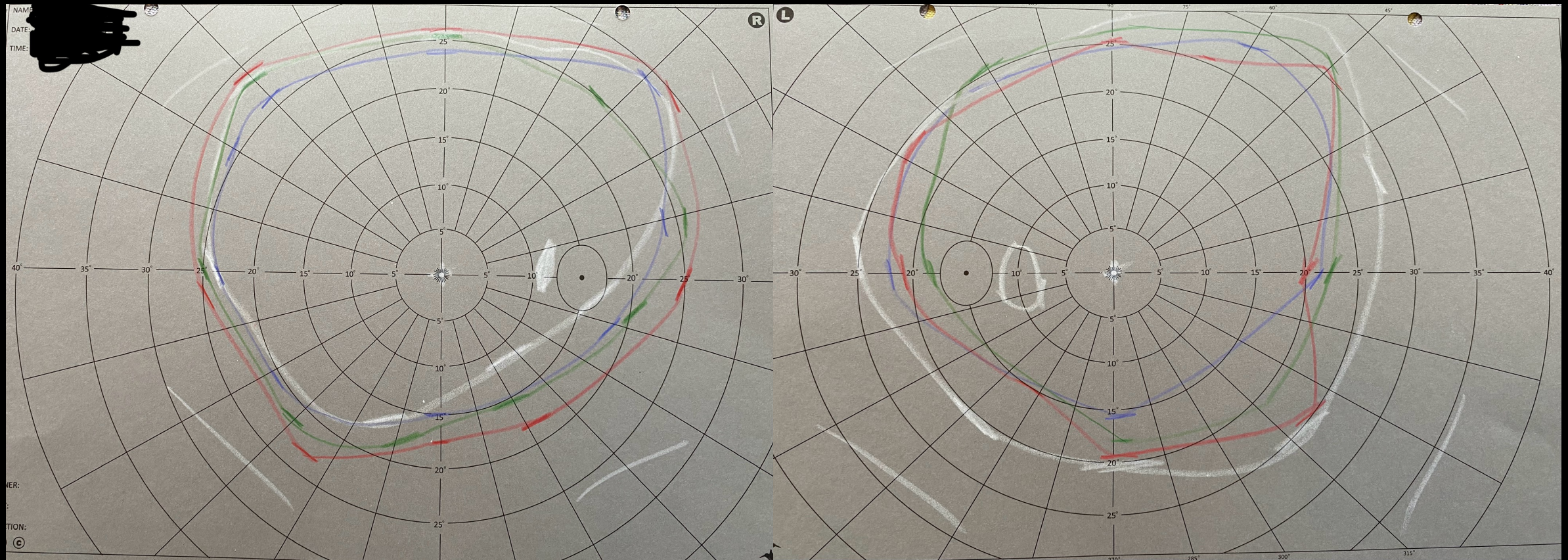
Goal: “I would like to return to driving”

Visualization: “I see my self standing, strong and feeling the ground with my feet”

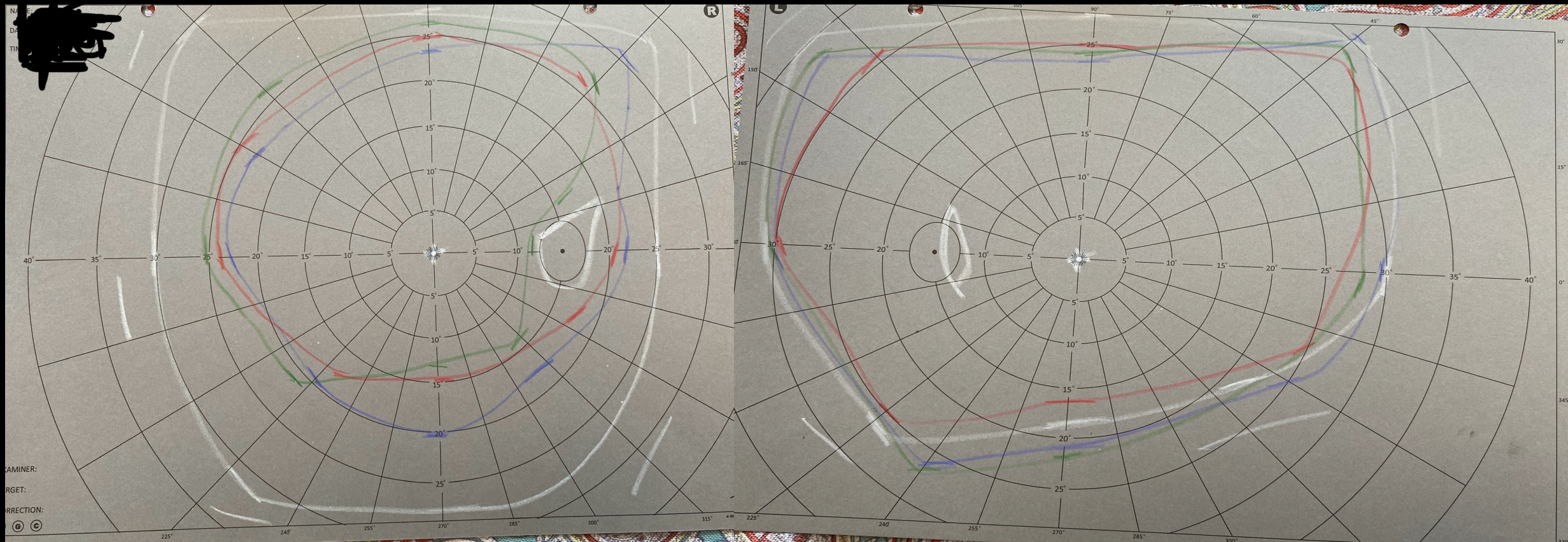
1 WEEK FOLLOW UP

- **Follow up**
- Improvement .
- Improved sleep, happier and less bothered by surroundings
- Able to stand Continued PT
- Walking short distances
- **Exam Findings**
- VA: 20/20 OD, OS, OU (D/N)
- Vergences (D) BI x/4/2 BO x/6/2. (N): BI X/ 12/6 BO X/8/6
- CT. Ortho distance. Near Ortho
- W4D: 4 dots (Distance and near light and dark)
- Phorias. Distance Ortho Near 2XP' Stereopsis: 30"
- NPC. x/12/18 Pupil : 5mm (1-2+)AO, OD. 5mm (1-2+)AO, OS
- No Visual Midline Shift noted Saccades: 5/3/3/4 Pursuits: 5/3/4/4
- **Plan:**
- Continue filters, recheck functional field 2 weeks
- Start NOR

FIELD 7 DAYS FIRST FILTERS



FIELDS AFTER 21 DAYS 1ST FILTERS



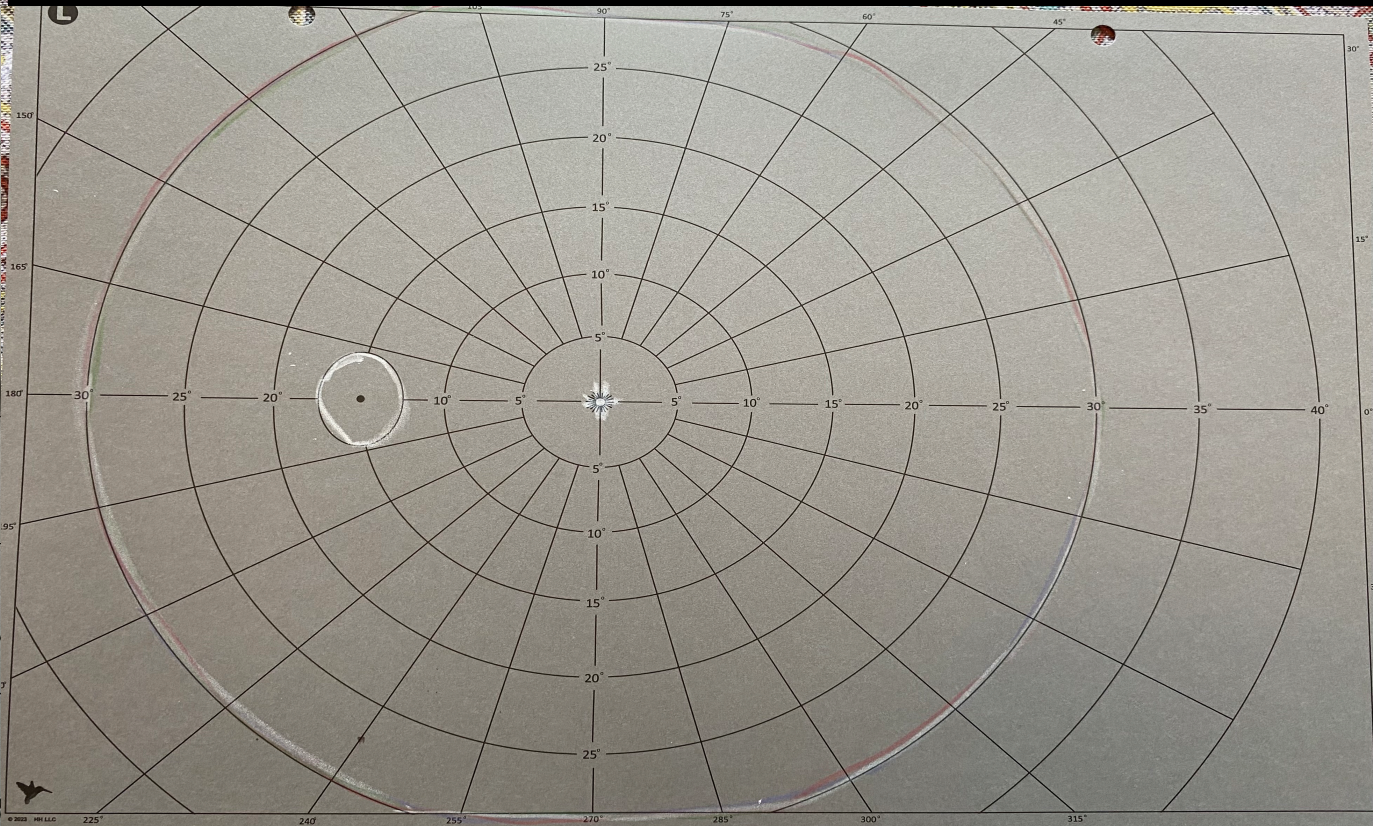
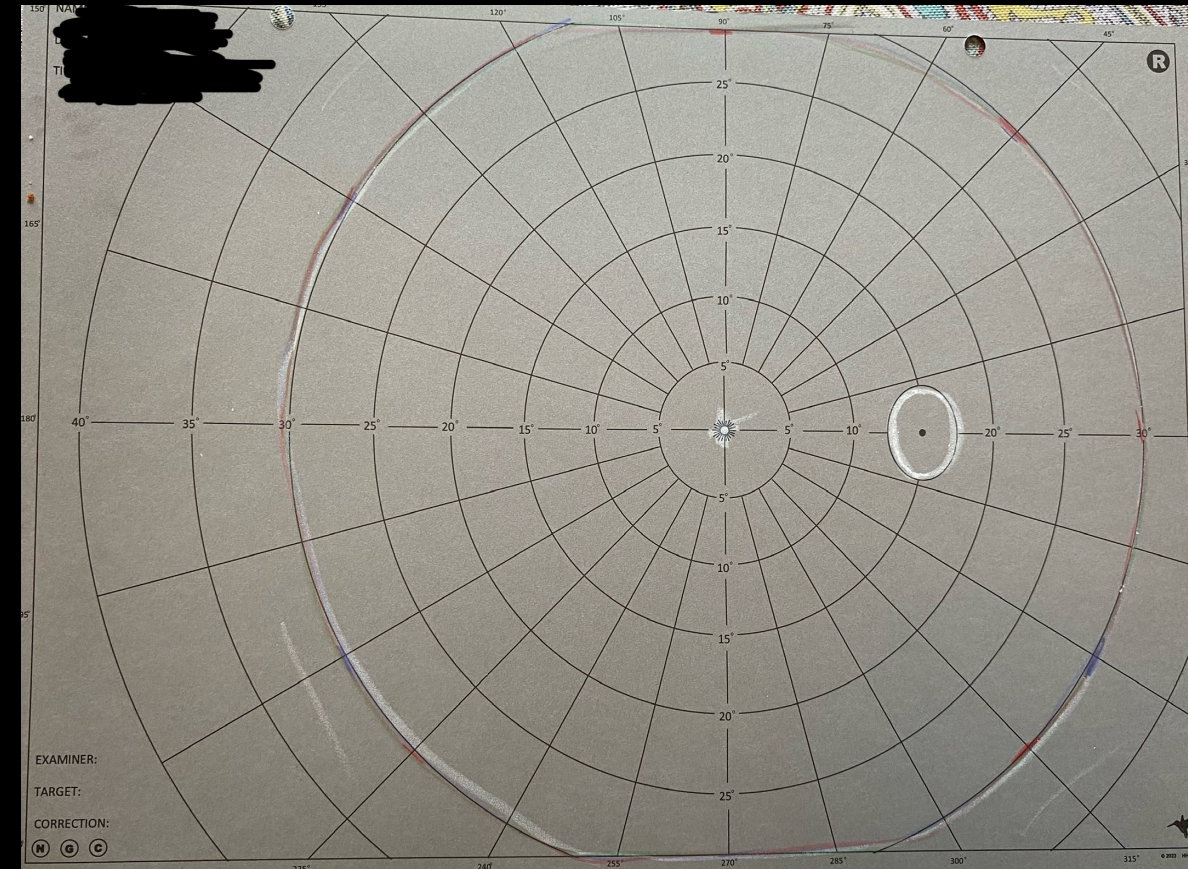
21 DAY FOLLOW UP 1ST FILTERS

- **Follow up**
- Improvement .
- Improved sleep, better mood, less visual disturbances
- Walking Continued PT
- Back to work 2 days a week
- **Exam Findings**
- VA: 20/20 OD, OS, OU (D/N)
- Vergences (D) BI x/2/0 BO x/6/2. (N): BI X/ 12/10 BO X/12/6
- CT. Ortho distance. Near Ortho
- W4D: 4 dots (Distance and near light and dark)
- Phorias. Distance Ortho Near 2XP' Stereopsis: 30"
- NPC. x/6/8 Pupil : 5mm (1+)AO, OD. 5mm (1+)AO, OS
- No Visual Midline Shift noted Saccades: 5/3/3/4 Pursuits: 5/4/4/4

TREATMENT

- Changes filters Alpha Omega/Mu Delta 20 minutes x 21 days
- Continue CoMra protocol
- NOR
- Continue with lifestyle changes
- Continue Mindfulness/Meditation/Gratitude
- Continue Grounding

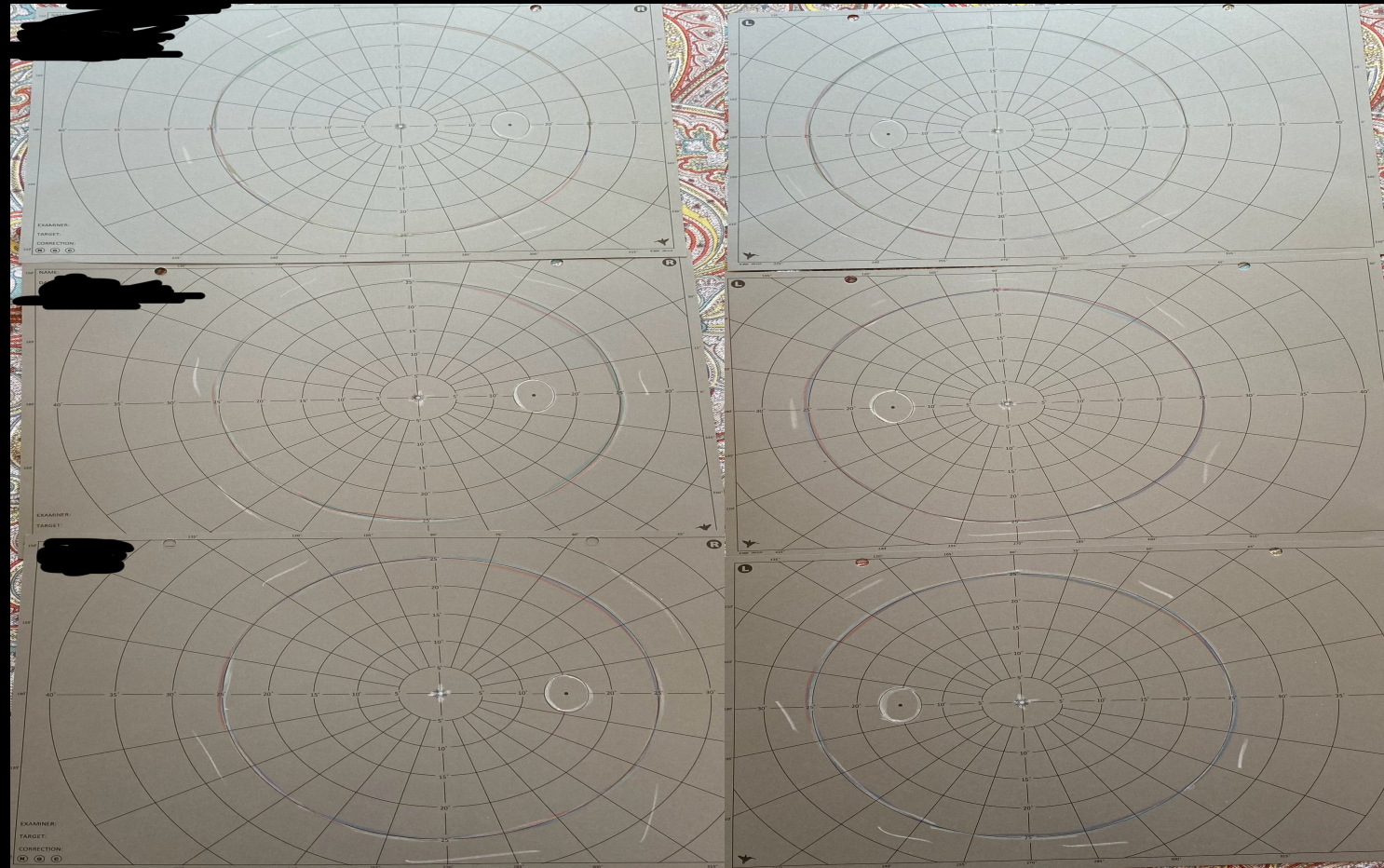
21 DAY 2ND FILTERS



TREATMENT

- D/C Syntonic treatment
- Continue NOR in office and at home
- Continue with gut health
- CoMra
- Meditation /Mindfulness/Grounding
- Recheck 1 month

1 MONTH, 3 MONTH, 6 MONTH



PROGRESS

- MV successfully completed the NOR program
- He has decided to become a snow bird.
- Lives in FL winter months
- Back to work full time
- Walking and running now

CASE #2

M.B.

- Patient:
- 50 yo CF reports to clinic
- Consult from different neurologist
- Treated by 3 different providers
- C/o dizziness, poor balance, frequent falls
- (+) MVA 7/2021 (symptoms started prior to this)
- Denies any concussion

HISTORY

- Dizziness feels like her entire world is moving
- Feels unsteady
- No precipitating cause
- No modifier
- Equal with eyes open or closed
- Equal with standing/sitting/laying down

TREATMENTS AND TESTS

Previous neurologist diagnosed
Vertiginous Migraine

Treatments: Ajovy, Ubrelvy,
Amitriptiline, Vestibular Therapy, Physical
Therapy, Chiropractic care,

X-Ray: Neck/Spine. (Unremarkable
per pt)

CT: (without contrast). (unremarkable
per pt)



COMPLAINTS

- (+)Me ☺
 - +) Poor depth
 - (+)Blurry vision D>>N
 - (+)Visual Fluctuations to lack of
 - (+)Lack of confidence walking
 - (+)Decrease of peripheral vision
 - (+)Poor balance
 - (+)Dry irritated eyes OD>>OS
 - (+)Eye fatigue
- (+)Unable to work as photographer
 - (+)Color less vivid
 - (+)Depression/sadness due travel
 - (+)Hot flashes/night sweats

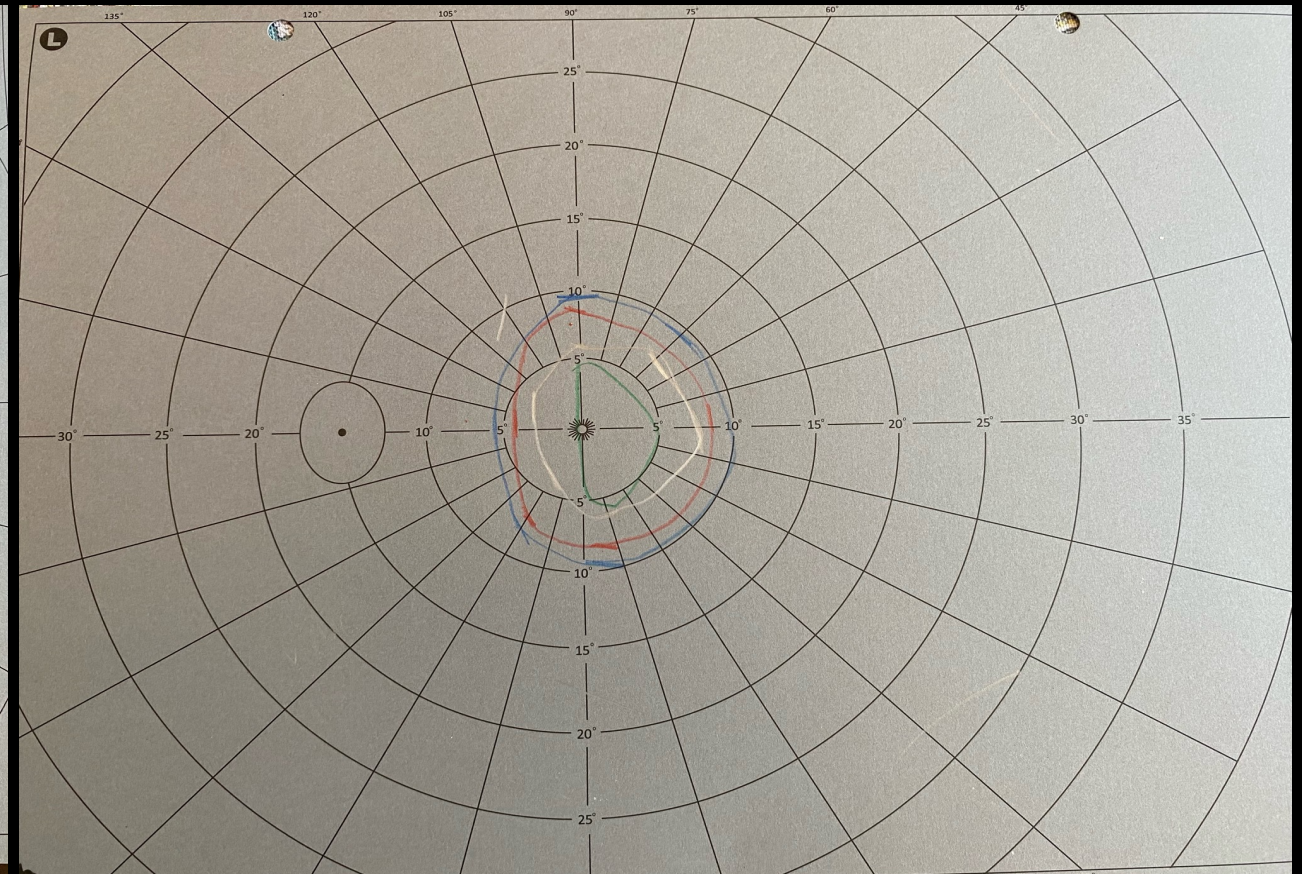
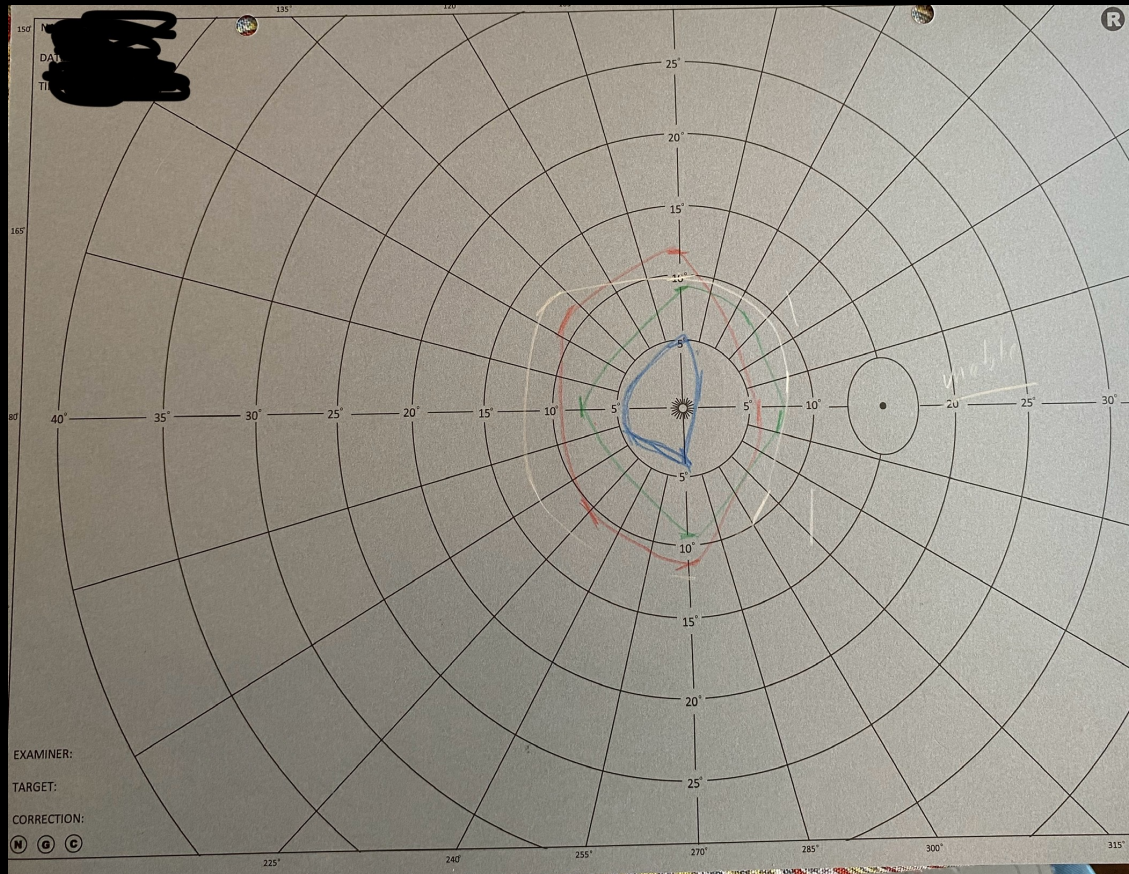
VISUAL ASSESSMENT

- **Visual Assessment:**
- Unaided VA: 20/25 O.D. and 20/25 O.S.
- Pupils: PERRL (-)APD. 5mm, 5mm and 3-4+ AO OD and OS
- EOM: Full range, choppy motion. (Nausea reported with movement)
- Confrontation Fields: FTFC O.D. and O.S. (questionable)
- Color Vision: 12/12 O.D.,O.S. (Ishihara)
- Ocular health: DES overall healthy IOP: 15/15 DFE: unremarkable, (-)pallor (-)neurological defects
- Retinoscopy: -0.25 -0.25 x 080 O.D. and -0.50 -0.50 x 090 O.S.
- Subjective (Distance). O.D. -0.12DS +1.75 VA 20/20
- O.S. -0.12 -0.25 x 090 ADD +1.75 VA 20/20
- Near VA. 20/20 O.D., O.S., O.U.
- Final: O.D. -0.12 +1.50 1BU VA 20/20
- O.S. -0.12 +1.50 DS 1BU VA 20/20

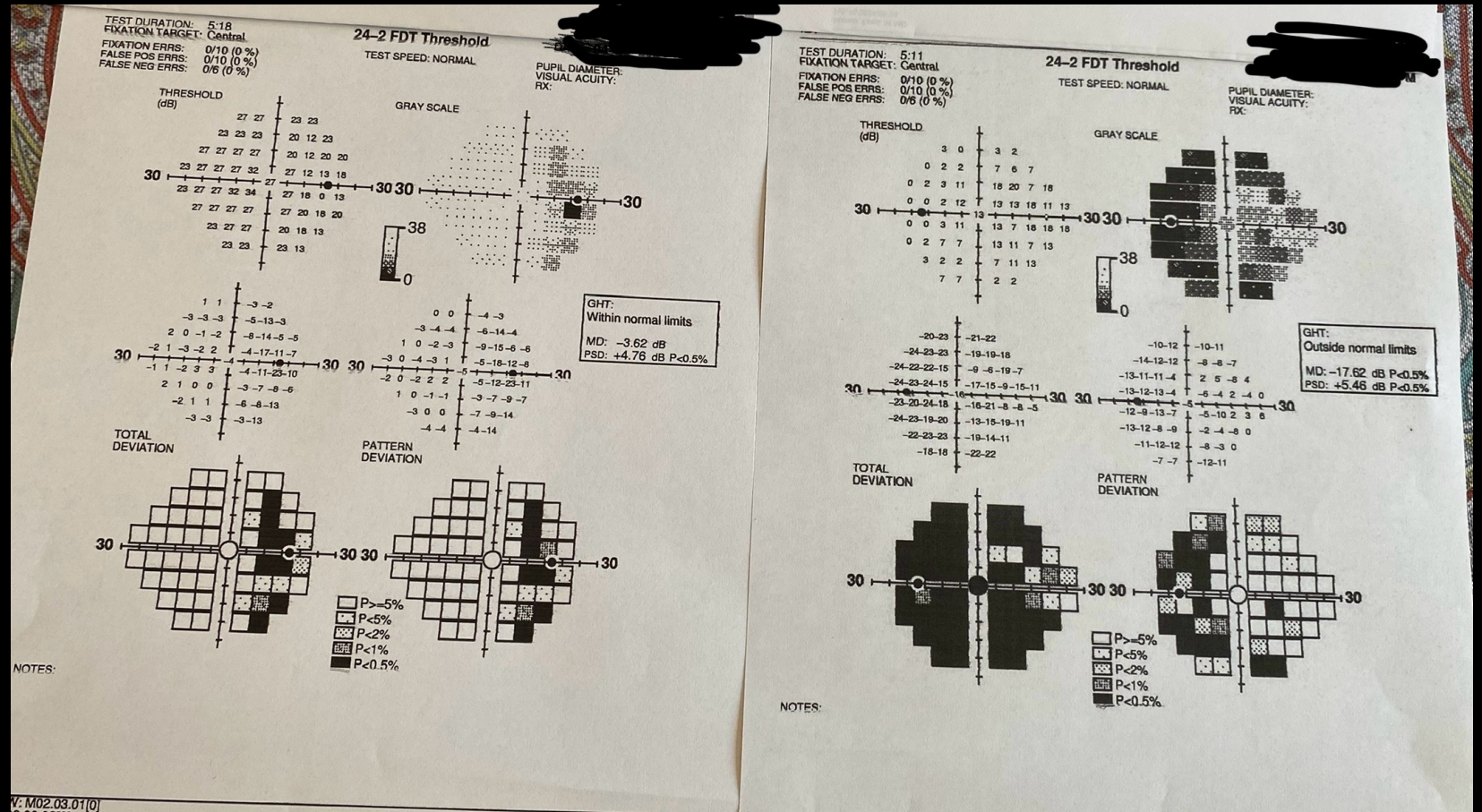
BINOCULAR FINDINGS

- **Binocular Findings**
- Distance Vergences. BI x/4/0 BO x/18/12
- Near Vergences. BI X/14/8 BO X/20/4
- Cover Test. Ortho distance. 2XP'. VG Phorias: 2EP (dist). 7XP'
- NPC. Ill sustained Visual Midline Shift: (+)
- W4D. 4 dots near, far. Full room illumination and dark
- NRA/PRA. +0.50/-0.75 Stereo: 40" Randot
- Pursuits : 1/1/1/1 Saccades: 1/1/1/1 (NSUCO)(A/A/HM/BM)
- Pursuits and Saccades made her feel dizzy and nauseated
- Prism: Noted immediate results with 1BU yoked
- Occlusion: Preferred temporal occlusion
- Did not like tints

INITIAL FIELDS



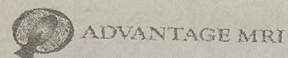
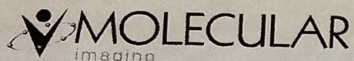
VISUAL FIELDS



ASSESSMENT/PLAN

- Assessment
 - Alpha omega pupil, BVD, Generalized contraction of fields
- Plan
 - Order MRI c/s contrast
 - STAT consult with neurologist
 - Start Syntonics in office
 - Discuss Gut health
 - Labs
 - Hormone testing

MRI



OBSERVATION

CLINICAL HISTORY: Patient states pain in the back of head and neck since MVA July 2021. Suspected case of Arnold- Chiari malformation or syringomyelia. No history of injury, no priors imaging.

COMPARISON: None.

TECHNIQUE: Different pulse sequences were performed in different planes with and without GD-DTPA injection for the brain. Images were sent through PACs for interpretation.

FINDINGS:

There is tiny abnormal signal intensity area measuring about 2.9 x 3.9 mm in AP x TR dimensions noted in the subcortical white matter of left parietal lobe, it appears isointense on T1 hyperintense on T2 and FLAIR images, no contrast enhancement seen suggestive of focal area of ischemia.

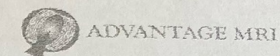
Another small abnormal signal intensity area measuring about 8.8 x 7.8 mm in AP x TR dimensions seen in the medial temporal lobe it appears hypointense on T1, FLAIR and hyperintense on T2, no contrast enhancement seen suggestive of chronic lacunar infarct.

No intracerebral or extra-axial hematomas or masses.

No infarctions could be depicted.

Normal MRI appearance of the cerebral and cerebellar parenchymal signals.

Normal MRI appearance of the deep white matter and central gray matter aggregates.



The ventricular system is unremarkable.

Normal MRI appearance of different anatomical parts of the brain stem namely the midbrain, Pons, medulla oblongata.

Normal MRI appearance of the petrous temporal bones, brainstem, vestibule cochlear nerves, cerebellopontine angles and pituitary gland with no definite masses.

No shift of midline structures.

Normal MRI appearance of orbital structures, both globes, optic nerves, optic chiasm, optic tracts and optic radiations.

Small abnormal signal intensity area noted in the marrow of right parietal bone it measures about 7.6 x 7.8 x 6.6 mm in AP x TR x CC dimensions, it appears hyperintense on T1, T2 and FLAIR images, no contrast enhancement appreciated suggestive of focal fat deposition/intraosseous hemangioma.

Mild mucosal thickening is noted in maxillary and ethmoidal sinuses bilaterally suggestive of bilateral maxillary and ethmoidal sinusitis.

Small rounded abnormal signal intensity lesion noted in the right maxillary sinus it appears hyperintense on T1, hypointense on T2 and hyperintense on FLAIR images suggestive of retention cyst/sessile polyp.

Rest of paranasal sinuses appear unremarkable.

No abnormal contrast enhancement seen.

No evidence of Arnold- Chiari malformation or syringomyelia seen.

IMPRESSION

1. Above-mentioned findings are suggestive of lacunar infarct in right temporal lobe, focal area of ischemia in the subcortical white matter of left parietal lobe, bilateral maxillary and ethmoidal sinusitis, small retention cyst/sessile polyp in right maxillary sinus and small area of focal fat deposition/intraosseous hemangioma in the right parietal bone.
2. Rest of the MRI brain is unremarkable.



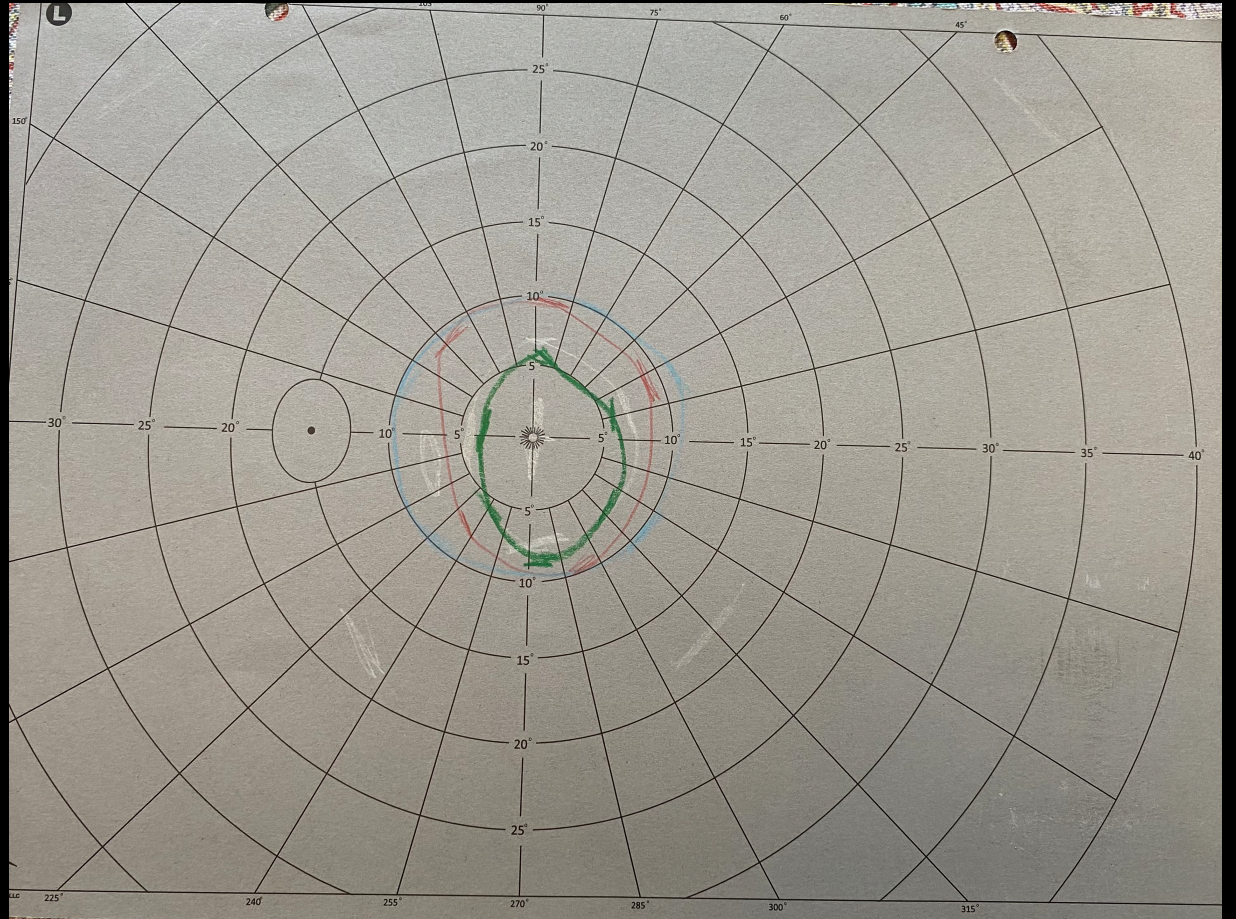
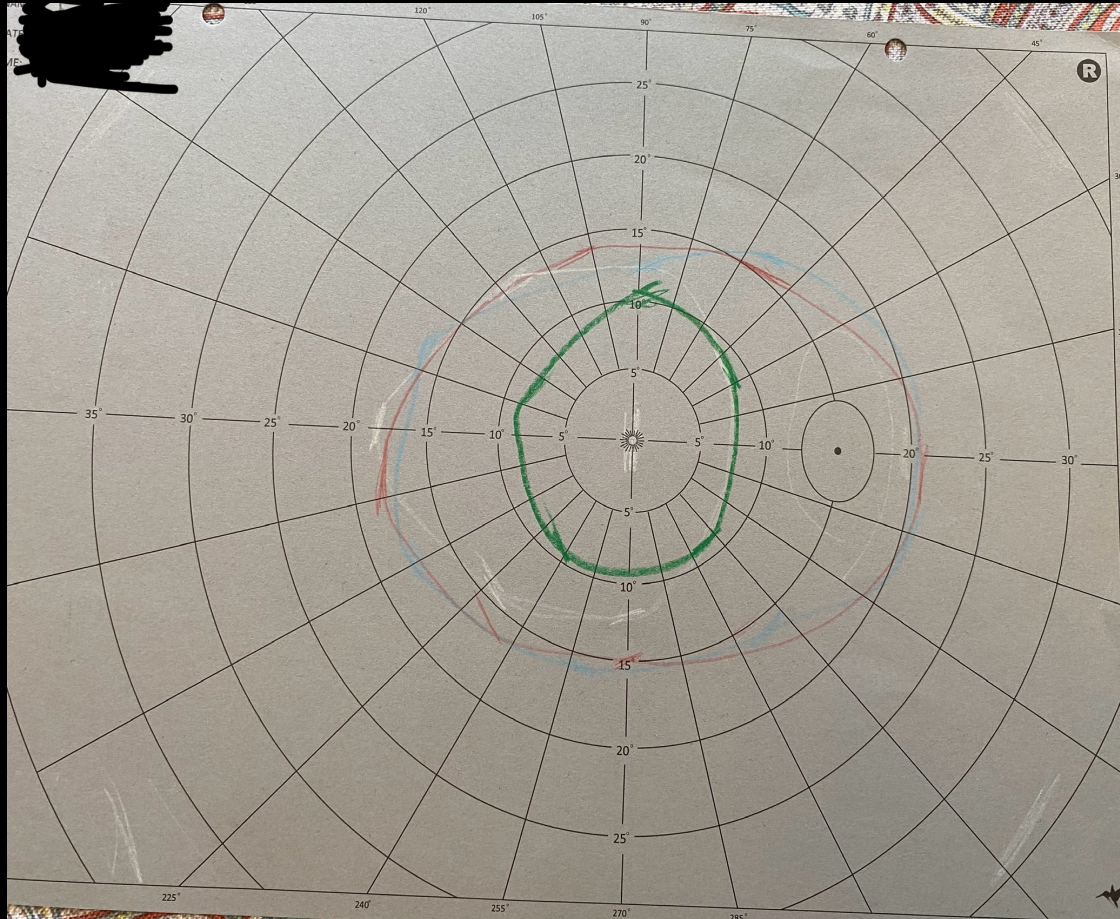
TREATMENT

- Treatment
 - Theta Omega /Mu Upsilon 10/10 min x 21 days
 - Grounding/Mindfulness/Gratitude
 - Hormonal treatment with ND
 - CoMra general wellness protocol
 - Castor oil packs 3 days out of the week
 - Dietary/Gut health modifications

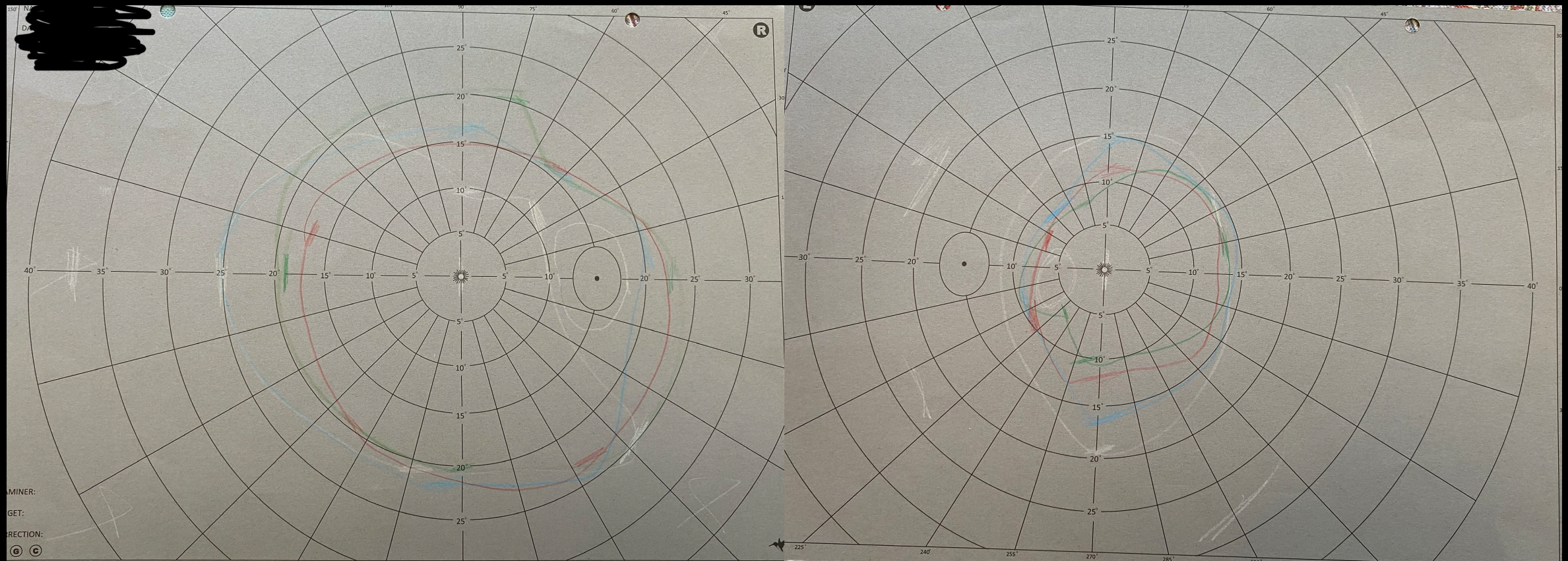
INTENTION/GOAL/MANTRA

- Intention: “I will feel stable”
- Goal: “I will return to photography and travel
- Mantra/Affirmation: *“I am centered and safe, accepting the perfection of my life. Everything is fine. centered and safe, accepting the perfection of my life. Everything is fine.”*

7 DAY FIELD



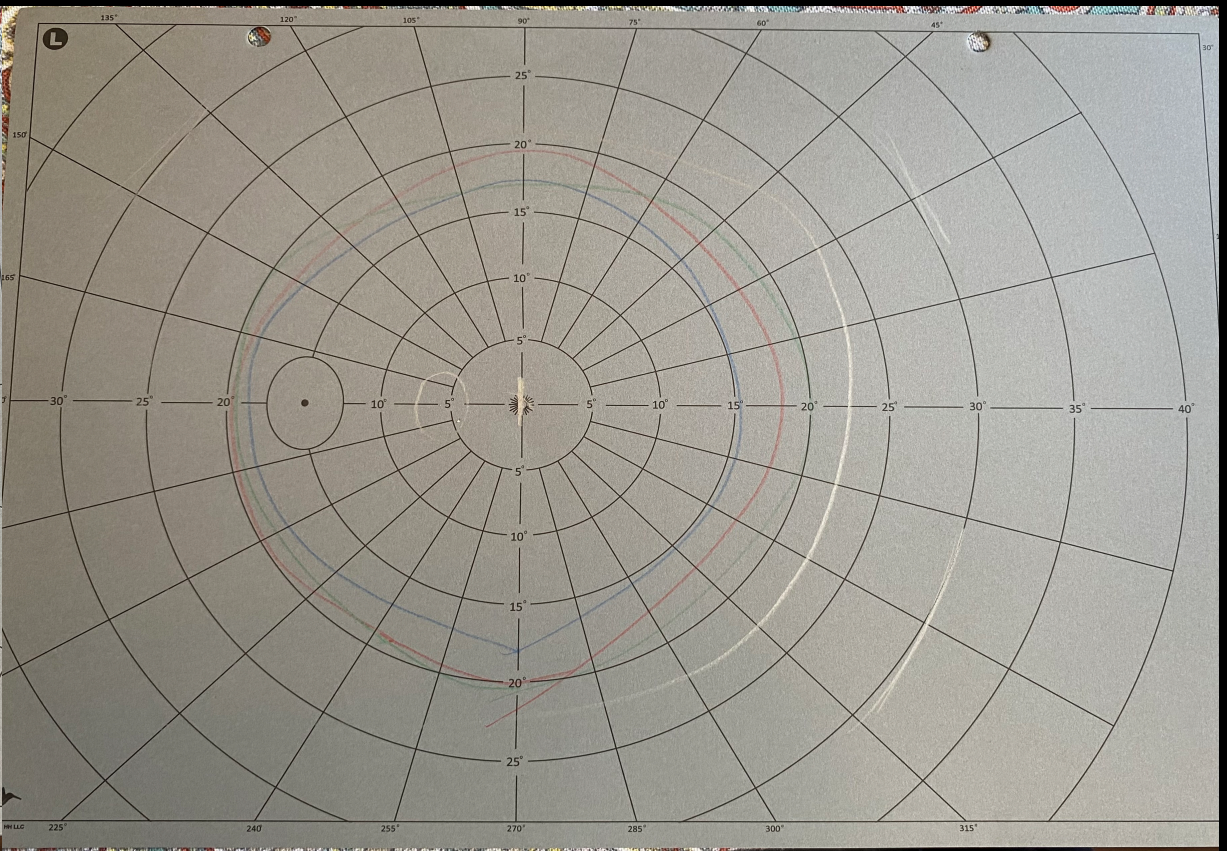
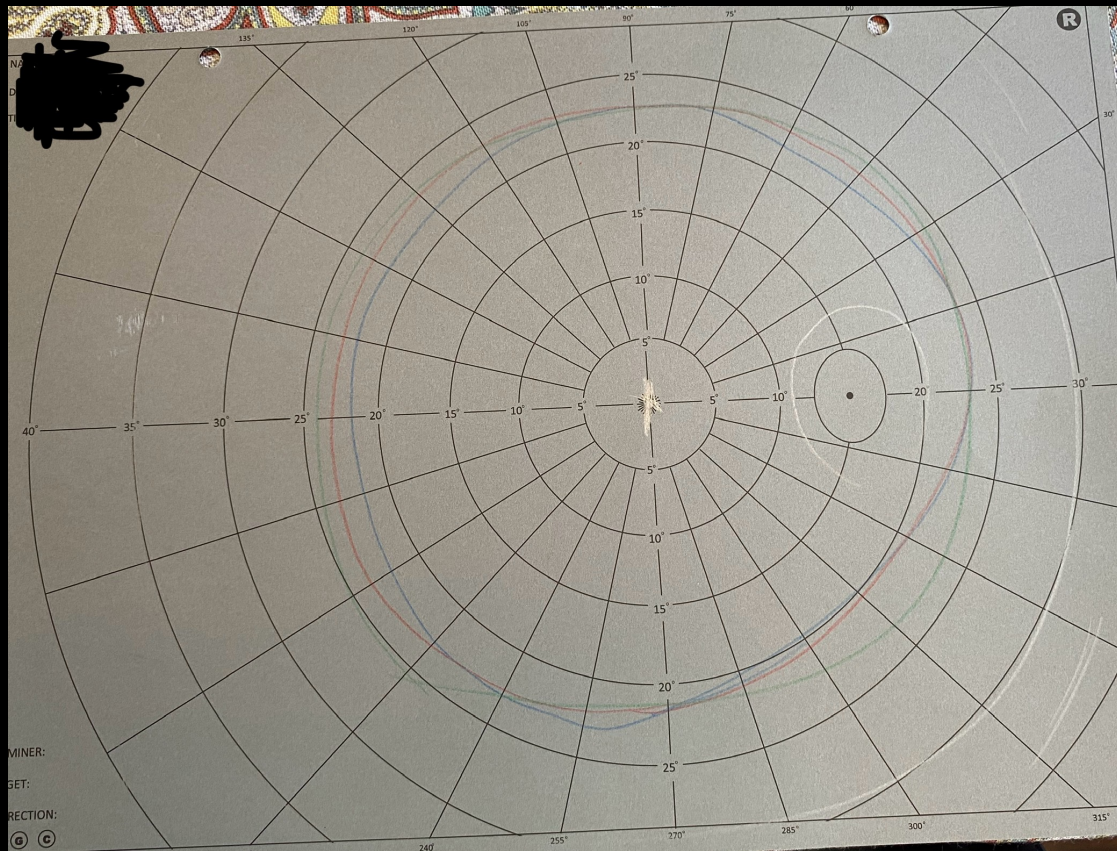
21 DAY FIELD



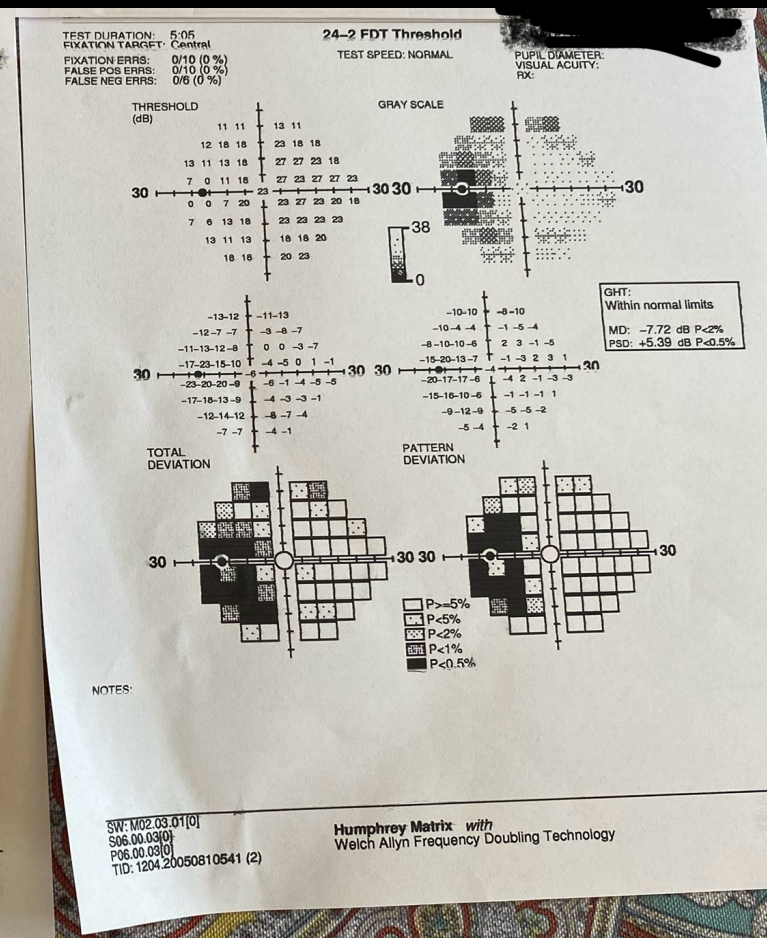
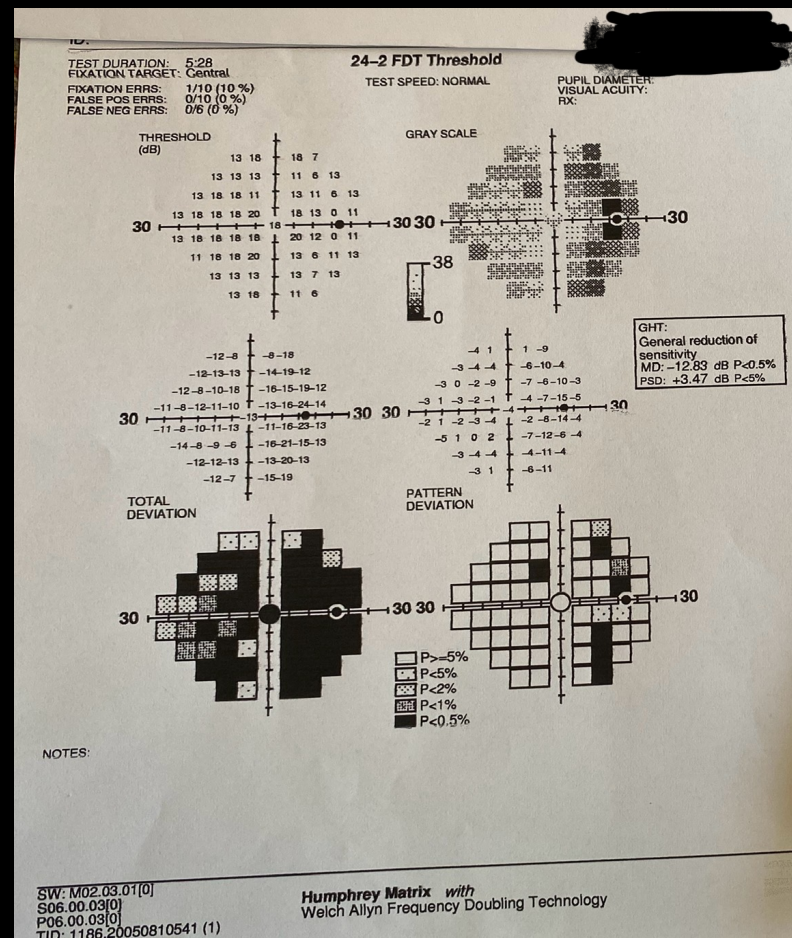
TREATMENT

- She continued care with neurology and cardiology
- Change in medications to prevent stroke
- Change in filters to Alpha Omega/Mu Delta 10/10 x 21 days
- NOR in office and at home
- coMra neurology protocol
- Dietary and lifestyle changes
- Hormonal therapy with ND

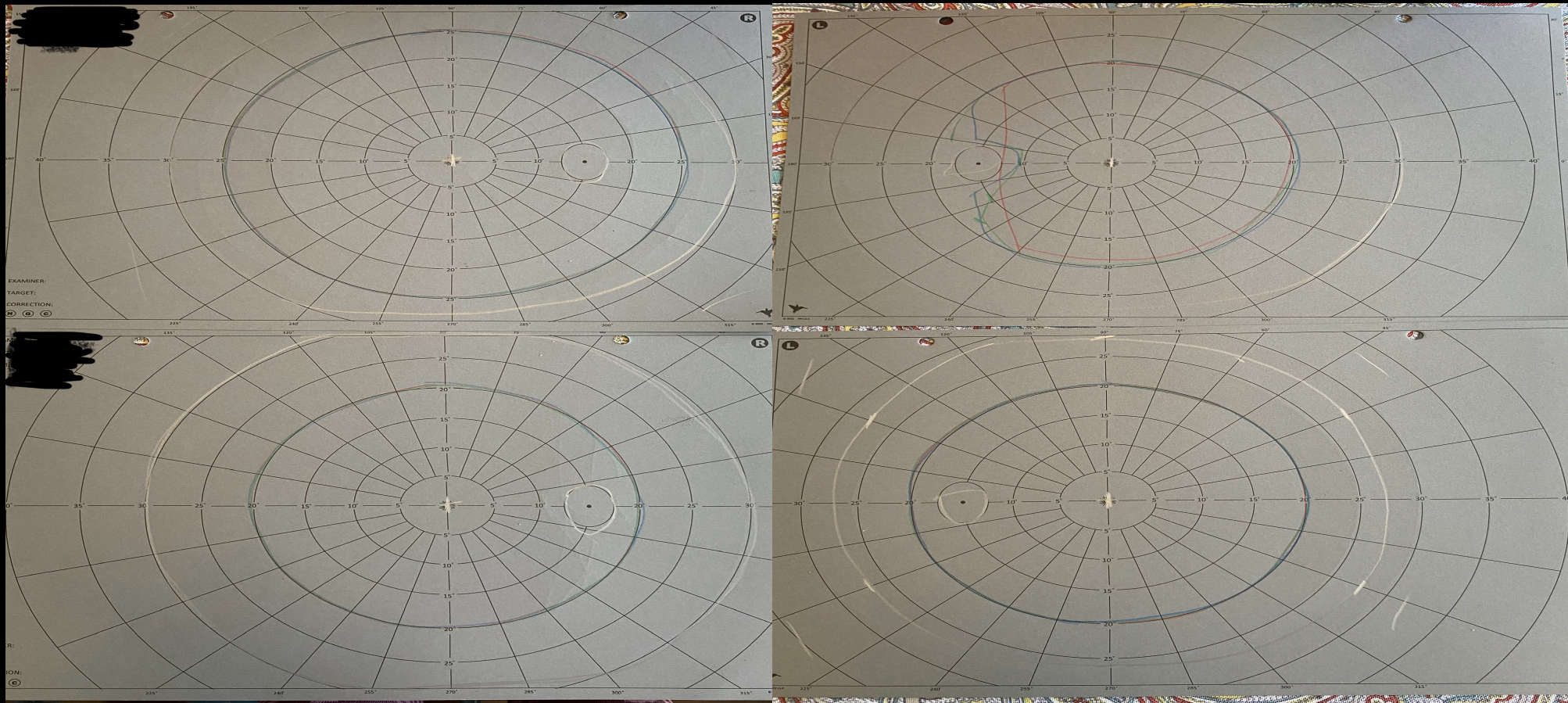
21 DAYS 2ND FILTERS



FIELDS



1 MONTH/3MONTH



MB PROGRESS

- MB feels much better
- Calls herself a “Syntonic Lifer”
- Completed 24 weeks of NOR and Syntonic Optometry in office and home
- Co-Managing with ND
- Co-Managing with Cardiology
- Under the care of neurologist
- Continues with CoMra unit
- Continues with goggles at home
- Recently returned from month long trip to Australia
- Back to photography
- Balance is better

PATIENT JK

- Patient:
- 21 yo CF reports to clinic post hospital stay
- Hospital x 5 days
- ER to Neurology consult during stay
- C/o “worse HA of her life”, dizziness, blurry vision, body aches, body weakness
- Flu vaccine caused Encephalitis
- IV meds and treatment at hospital

MEDICAL HISTORY

- (+) Anxiety Disorder
- (+) Depression
- (+) Asthma
- (+) 4 concussions in the past 10 years from sports)
- Most recent 2 years prior from falling on ice
- Meds: Allegra, Gabapentin, IB, Singular, Tylenol
- Testing: MRI/Spinal Tap/CT/ Neuro Exam/Blood work

COMPLAINTS/CONCERNS

- HA (9/10 throbbing)
- No modifier
- Nausea
- Dizziness (constantly in motion)
- Blurry Vision OS>>OD
- Black dots
- Feels that she is tilting her head
- Loss of peripheral vision
- “Bizarre visual complaints”

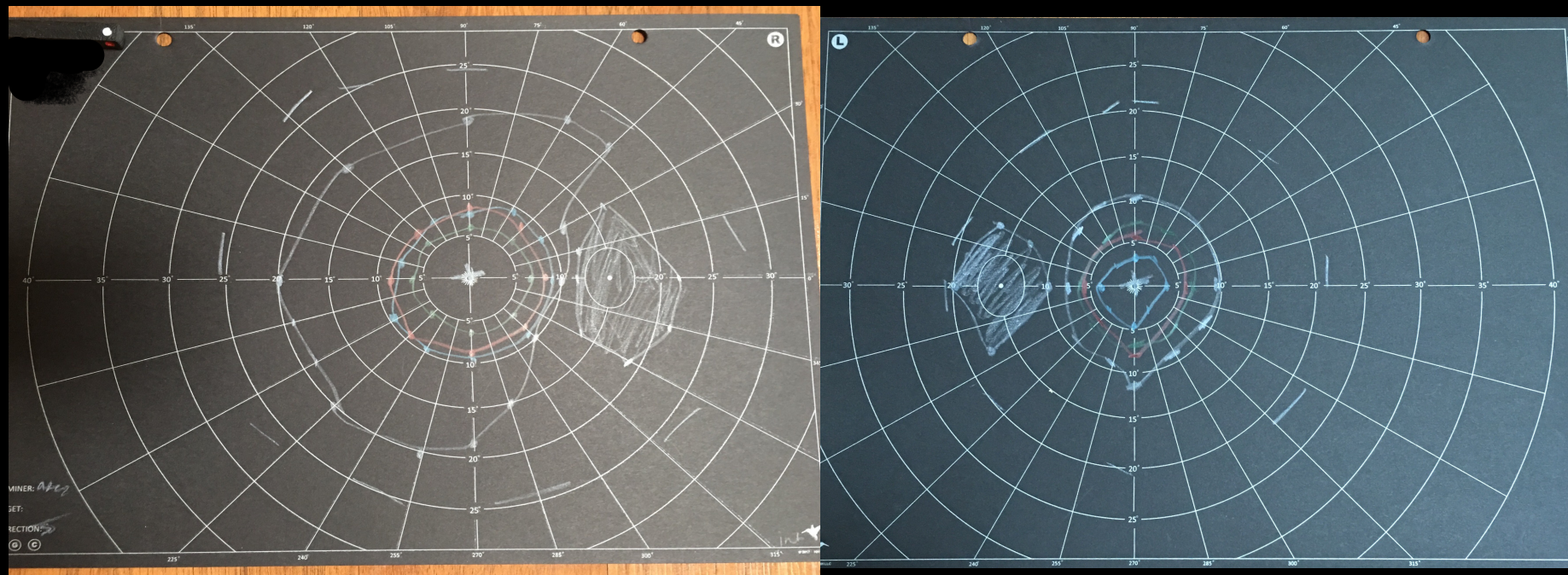
VISUAL ASSESSMENT

- **Visual Assessment:**
- Unaided VA: 20/250 O.D. and 20/250 O.S.
- Pupils: PERRL (-)APD. 7mm, 7mm and 3-4+ AO OD and OS
- EOM: Full range, choppy motion. (Nausea reported with movement)
- Confrontation Fields: FTFC O.D. and O.S.
- Color Vision: 12/12 O.D.,O.S. (Ishihara)
- Ocular health: DES with Bleph overall healthy IOP: 12/12 DFE: unremarkable, (-)pallor (-)neurological defects
- Retinoscopy: -4.25 -0.25 x 180 O.D. and -4.50 -0.50 x 180 O.S.
- Subjective (Distance). O.D. -4.25 -0.25 x 180 +1.00 VA 20/20
- O.S. -4.25 -0.50 x 180 +1.00 VA 20/20
- Near VA. 20/20 O.D., O.S., O.U.
- Final: O.D. -4.12 -0.25 x 180 +0.75 0.5 BU VA 20/20
- O.S. -4.12 -.025 x 180 +0.75DS 0.5BU VA 20/20

BINOCULAR FINDINGS

- **Binocular Findings**
- Distance Vergences. BI x/6/4 BO x/2/1
- Near Vergences. BI X/14/12 BO X/8/2
- Cover Test. 2 XP distance. 4XP'. VG Phorias: 1XP (dist). 12XP'
- NPC. x/8/12 Visual Midline Shift: (+)
- W4D. 4 dots near, far. Full room illumination and dark
- NRA/PRA. +2.00/-0.50 Stereo: 30" Randot
- Pursuits : 4/3/3/3 Saccades: 4/3/3/3 (NSUCO)(A/A/HM/BM)
- Pursuits and Saccades made her feel dizzy and nauseated
- Prism: Noted results with .50 BU yoked
- Occlusion: did not like occlusion
- Did not like tints

INITIAL FIELD



ASSESSMENT /PLAN

- Assessment:

- DES with Blepharitis
- Alpha Omega Pupil
- CI
- OMD

- Plan:

Hypochlorous spray, MSM drops qid
Syntonics in office and home
NOR
Grounding/Sunning/Palming

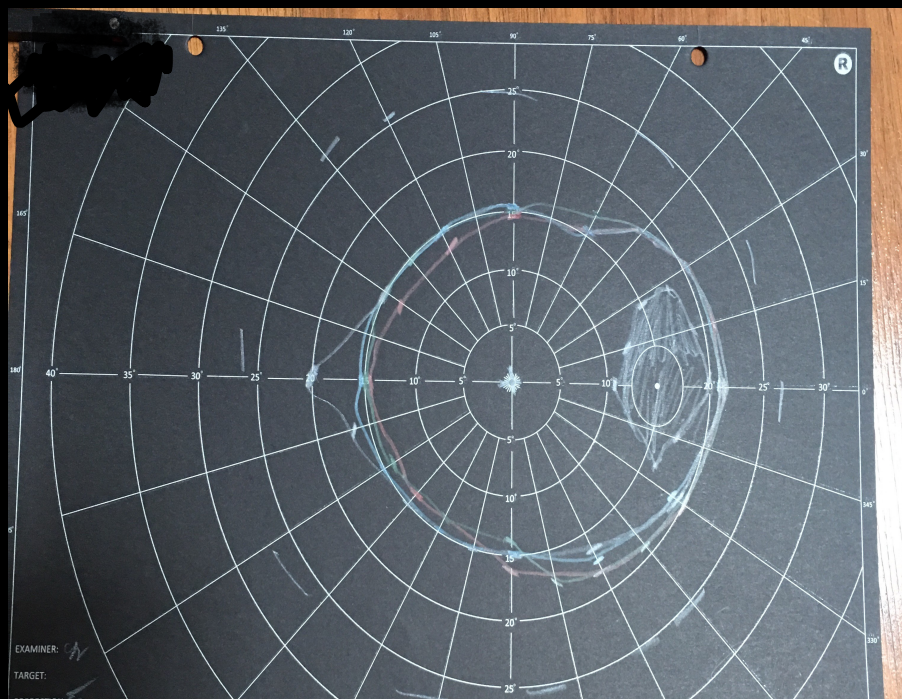
TREATMENT

- **Treatments:**
 - Upsilon Omega /Mu Upsilon 10/10 min x 21 days
 - Grounding/Mindfulness/Gratitude
 - Somatic Body work
 - Hair Tissue Mineral Analysis (with ND)
 - CoMra general wellness protocol
 - Castor oil packs 3 days out of the week
 - Dietary/Gut health modifications

INTENTION/GOAL/MANTRA

- Intention: “I am healing my entire body”
- Goal: “I will return to school”
- Mantra: “*I rule my mind with love.*”

1 WEEK



21 DAY



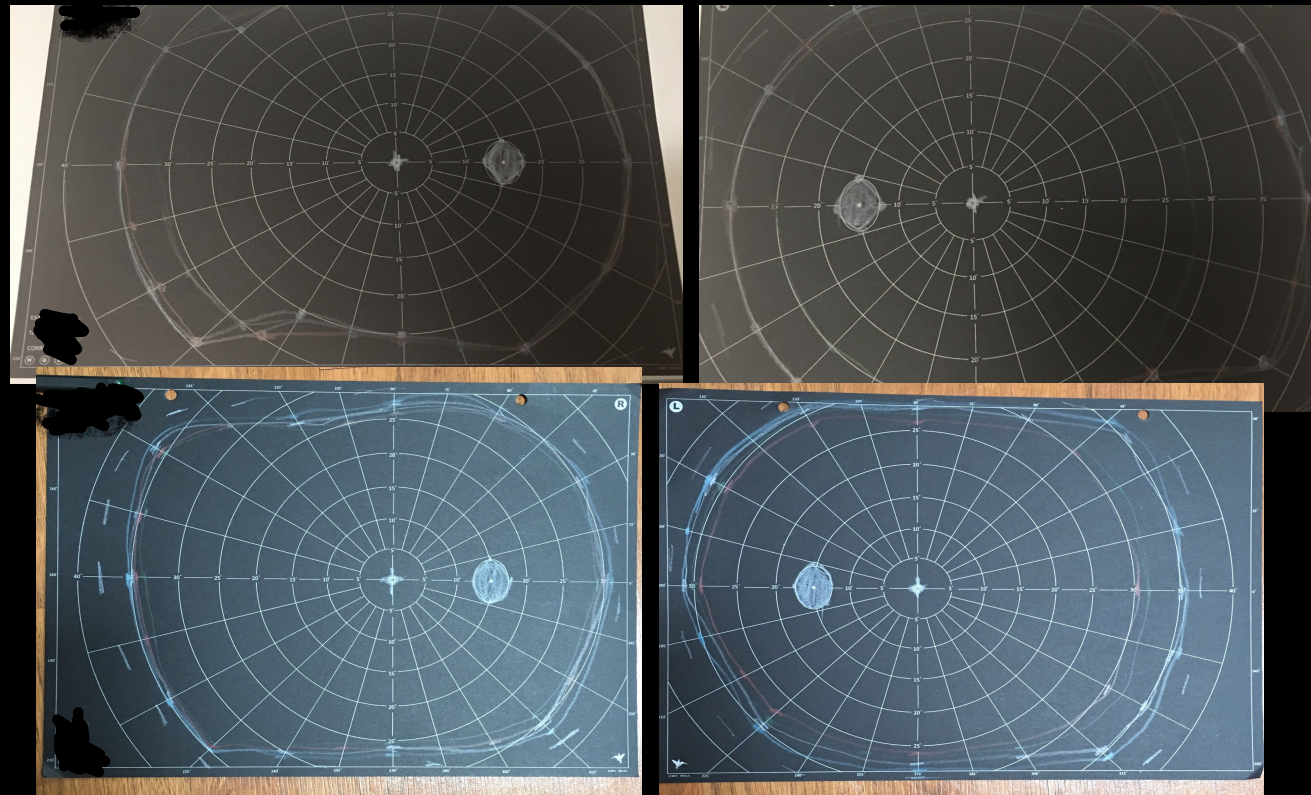
21 DAY

- **21 Day follow up Exam findings**
- Patient reports no HA
- No dizziness / Balance going great
- Sleeping great
- Mom reports throwing "fits" over sitting for 20 minutes
- **Exam Findings**
- VA: 20/20 O.D., O.S., OU (D/N)
- MRx: -4.00 DS. -4.00 DS
- Vergences (D) BI x/2/0 BO x/2 /0 (N): BI X/ >45 BO X/>45
- CT. Ortho distance. Ortho near Phoria: Ortho distance/near
- NRA/PRA: +1.75/-2.00
- W4D: 4 dots (D/N) light and dark EOM: FROM (smooth)
- NPC. Ill sustained Pupil : PERRL (-)APD 5mm (-)AO O.D. 5mm (-) AO, O.S.
- Stereopsis: 20" No Visual Midline Shift noted
- Saccades: 5/5/5/5 Pursuits: 5/5/5/5

TREATMENT

- Patient wanting to stop with Syntonics (20 minutes too much)
- D/C Syntonics at home
- Continue body work with goggles Omega N/Mu Delta
- Continue care with ND
- NOR in office at home
- Continue Life Style Changes
- Recheck 1 month

1 MONTH 6 MONTH



Pt was out of town
for her 3 month

JK PROGRESS

- She graduated from the NOR program
- Uses goggles prn
- Graduated college
- Special Educational teacher
- Recently Engaged



DEEPEST GRATITUDE

- Thank you!!
- Questions or comments: DrSantoyoLLC@gmail.com

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