

Experience EXPO With Us!

- **Main Stage - *Exhibit Hall – Booth P1586***
Our Main Stage sessions feature free, promotional content for all attendees.
- **Vision Series - *Thursday, Feb 20 and Friday, Feb 21***
Grab a bite to eat and continue learning over breakfast or lunch!* Listen to industry leaders as they address the latest clinical innovations in a relaxed and collaborative environment.

**Open to Optometrists only. Not for Credit. Meals offered on first-come, first-serve basis to pre-registered attendees.*

- **Exhibit Hall Hours**

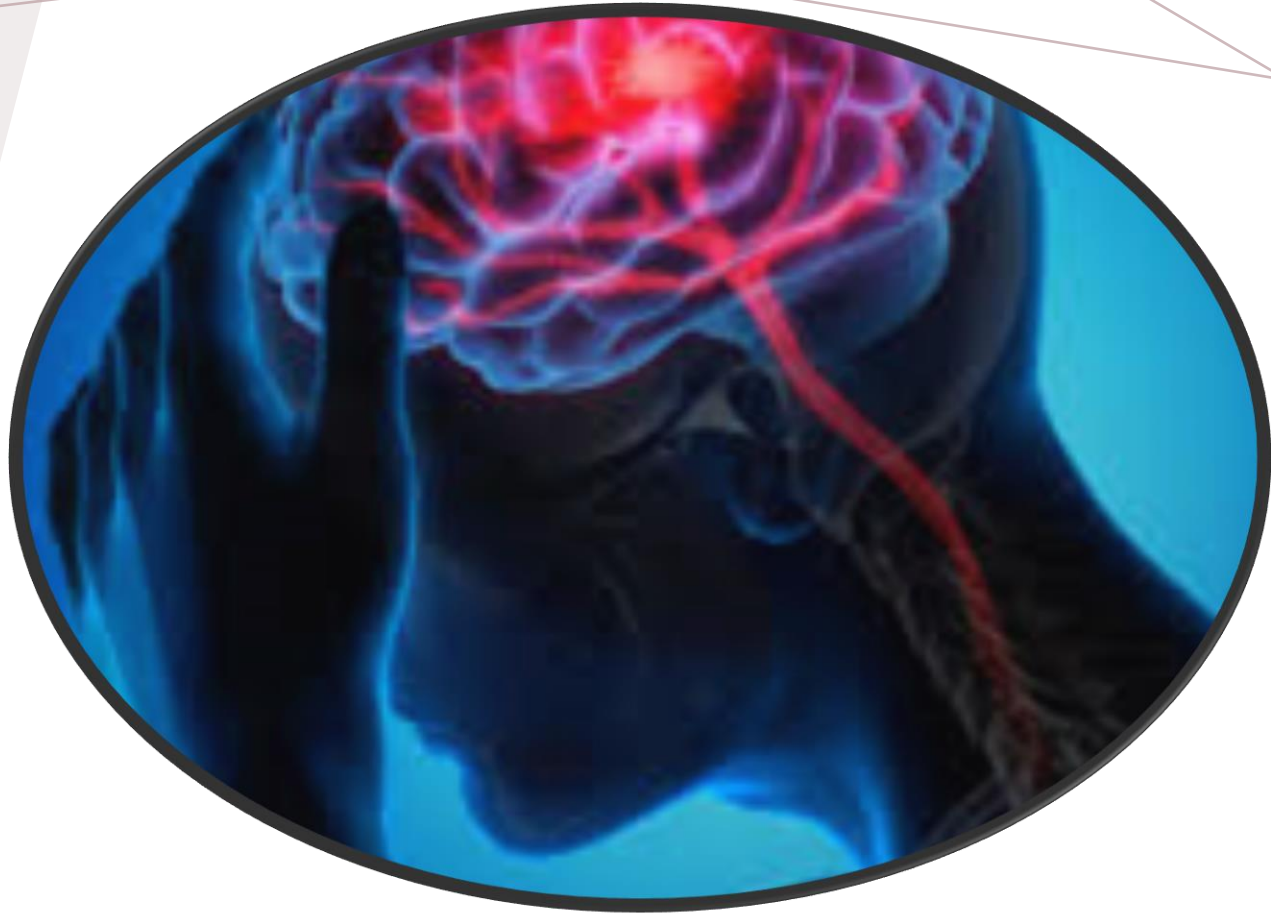
Thursday, Feb 20	9:30am – 6:00pm
Friday, Feb 21	9:30am – 6:00pm
Saturday, Feb 22	9:30am – 3:00pm

Socials @ Poolside – Rosen Centre

Conferee Happy Hour	Wed, Feb 19	6:00-7:00pm
Conferee Happy Hour	Thur, Feb 20	6:00-7:00pm
Tropical Cocktail Reception	Fri, Feb 21	6:00-7:30pm

***I COULD HAVE
TREATED THAT!***

***DEVELOPING A
HEADACHE CLINIC***



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Vision
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Disclosures:

Faculty, Advisory Board Member or Speaker:

Alcon

Allergan

Neurolens

ABB

Partner: Sports Vision Pros, LLC

No conflicts with this COPE Presentation

A LITTLE ABOUT DR NANASY



- Director, Florida Institute of Sports Vision
@The Eye Center
@Holy Cross Sports Medicine
- **Team Doctor:** Miami Dolphins, Inter Miami CF, Miami HEAT Check Gaming, UCF, Barry U, St. Thomas U, American Heritage, St. Thomas Aquinas Athletics
- **Preferred eye care provider:** Joe Dimaggio Children's hospital Orthopedics, Holy Cross Hospital, FORCE Physical Therapy, Pinecrest Academy Athletics
- My professional goal.....

GREEN SCENE
Earth-friendly
best practices
PAGE 14

**EASING
THE BURDEN**
Optometry
takes on
student
loan debt
PAGE 30

THE FUTURE OF
OPTOMETRY IS NOW
MAR/APR 2020

Eyes
on
the
Ball

you can
retes
st



AOA



GOALS FOR TODAY...



HIT-6™
(VERSION 1.1)

This questionnaire was designed to help you describe and communicate the way you feel and what you cannot do because of headaches.
To complete, please circle one answer for each question.

HEADACHE IMPACT TEST™

1 When you have headaches, how often is the pain severe?

Never	Rarely	Sometimes	Very Often	Always
-------	--------	-----------	------------	--------

2 How often do headaches limit your ability to do usual daily activities including household work, work, school, or social activities?

Never	Rarely	Sometimes	Very Often	Always
-------	--------	-----------	------------	--------

3 When you have a headache, how often do you wish you could lie down?

Never	Rarely	Sometimes	Very Often	Always
-------	--------	-----------	------------	--------

4 In the past 4 weeks, how often have you felt too tired to do work or daily activities because of your headaches?

Never	Rarely	Sometimes	Very Often	Always
-------	--------	-----------	------------	--------

5 In the past 4 weeks, how often have you felt fed up or irritated because of your headaches?

Never	Rarely	Sometimes	Very Often	Always
-------	--------	-----------	------------	--------

6 In the past 4 weeks, how often did headaches limit your ability to concentrate on work or daily activities?

Never	Rarely	Sometimes	Very Often	Always
-------	--------	-----------	------------	--------

▼ + ▼ + ▼ + ▼ + ▼
COLUMN 1 (6 points each) COLUMN 2 (8 points each) COLUMN 3 (10 points each) COLUMN 4 (11 points each) COLUMN 5 (13 points each)

To score, add points for answers in each column. Total Score
Please share your HIT-6 results with your doctor.

Higher scores indicate greater impact on your life.
Score range is 36-78.

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1. Understand how to evaluate using various testing methods and questionnaires for headache patients.
2. Develop a testing protocol for your office
3. Understand why specific testing and measurements can help assist in your headache treatment plan.
4. Gain knowledge of how primary care optometry can assist in team approach treatment with other specialists

Optometrist should be part of the HA solution protocol



- Optometrists
- PCP
- Physical Therapy
- Chiropractors
- Neurologist

WHY CONSIDER DEVELOPING A HEADACHE CLINIC?

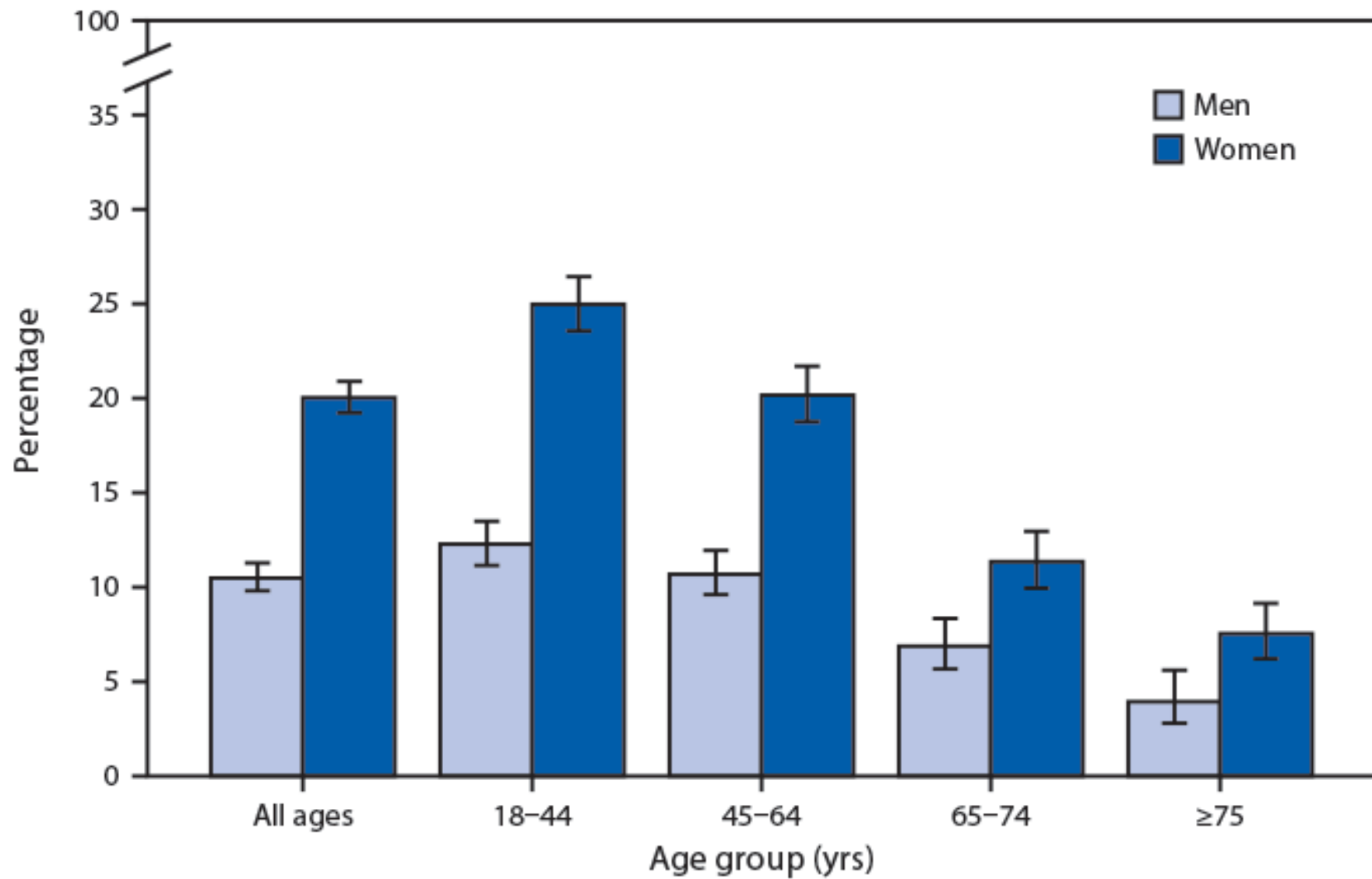
HEADACHES AND MIGRAINES ARE AMONG THE MOST COMMON DISORDERS OF THE HUMAN NERVOUS SYSTEM WORLDWIDE.

A RECENT REVIEW ON THE GLOBAL PREVALENCE OF HEADACHES REPORTED AN ESTIMATED PREVALENCE OF ABOUT 52%.¹

UNCORRECTED REFRACTIVE ERRORS AND BINOCULAR VISION CONDITIONS ARE THE MAJOR CAUSES OF VISION-RELATED HEADACHES.⁵



Frequency of Headaches





Essential First steps

All intake forms include a HA questions

- What do you do additionally if they check off, “Yes, I get headaches?”
- Additional HA questionnaire protocol
- HITT 6 questionnaire
- Concussion questionnaire- BISS Brain Injury Symptoms
- Medication questionnaire
- Do you order additional testing before you see the patient?

Primary headaches: describes head pain due to the headache condition itself, and not a result of another cause. The three common types of primary headache

- Migraine
- Tension
- Cluster.

Secondary headache: is one that is present because of another condition such as sinusitis, for example.

1. Headache classification committee, International Headache Society. Classification and diagnostic criteria for headache disorders, cranial neuralgias, and facial pain. *Cephalalgia*. 2004;24(Suppl 1):1-160. [PubMed] [Google Scholar]
2. Rasmussen BK, Jensen R, Schroll M, Olesen J. Epidemiology of headache in a general population – a prevalence study. *J Clin Epidemiol*. 1991;44:1147-57. [PubMed] [Google Scholar]



RED FLAGS

- First or worst headache ever
- New onset
- Onset after age 50
- Change in pattern of headache
- Worsening headache
- Acute or sudden onset
- Sudden onset during exertion (e.g., coughing, sneezing, sexual activity)
- With postural link
- In a setting of malignancy or HIV
- Waking at night
- Systemic symptoms (e.g., fever, weight loss, cough)
- Neurologic symptoms or signs



Really Red Flags...

Headaches that may be indicative of a potential emergent etiology should go straight to the ER or neurology STAT!

- Thunderclap onset
- Loss of consciousness/confusion
- Stiff neck (as in meningitis)
- Papilledema
- Visual field defect
- Atypical pupillary findings



Secondary Headaches Requiring Additional Investigation

Secondary Headache	Possible Etiology
Recurrent headaches in patients younger than age five.	Arteriovenous (AV) malformation.
Recurrent headaches in patients older than 50.	Cranial arteritis, mass lesion.
Abrupt-onset, acutely painful headache (“worst headache of my life”).	Subarachnoid hemorrhage.
Headaches of recent origin that are becoming increasingly more painful.	Mass lesion; subdural hematoma.
Headaches with concomitant fever, stiff neck, vomiting, cutaneous rash.	Meningitis, encephalitis, Lyme disease, collagen vascular disease.
Headaches associated with non-remitting neurological signs or symptoms such as papilledema, vertigo, seizures, personality changes.	Mass lesion, AV malformation, increased intracranial pressure, encephalitis, meningitis.
Headaches abruptly after bending, coughing, exertion or Valsalva.	Mass lesion, subarachnoid hemorrhage.
Headaches abruptly after head trauma.	Epidural or subdural hematoma.
Headaches associated with systemic cancer or HIV.	Metastasis, opportunistic neurologic infection.
Headaches during pregnancy or postpartum.	Venous sinus thrombosis.

“Thunderclap” Headache

Persistent Worsening Headache

Subarachnoid hemorrhage

Cerebral venous sinus thrombosis (CVST)

Reversible cerebral vasoconstriction syndrome

Carotid/vertebral artery dissection

Pituitary apoplexy

Intracerebral hemorrhage/hematoma

Hypertensive encephalopathy

Idiopathic thunderclap hemorrhage (Call–Fleming syndrome)

Raised cerebrospinal fluid (CSF) pressure (tumor, abscess, CVST, idiopathic intracranial hypertension)

Low CSF volume (post-lumbar puncture, spontaneous CSF leak)

Meningitis (acute/chronic)

Hypoxia/hypercapnia

Substance abuse/withdrawal

Systemic inflammatory conditions, including temporal arteritis

Conditions Associated with Secondary Headache

TABLE. THE SNOOP MNEMONIC FOR SECONDARY HEADACHE DISORDER RED FLAGS


Mnemonic	History features	Physical examination features
S ystemic	History of malignancy, immunosuppression, or HIV or complaints of fever, chills, night sweats, myalgias, weight loss, or jaw claudication	Abnormal systemic examination, including blood pressure and temperature
N eurologic	Focal or global neurologic symptoms, including change in behavior or personality, diplopia, transient visual obscurations, pulsatile tinnitus, motor weakness, sensory loss, or ataxia	Abnormal neurologic examination
O nset, sudden	Headache reaches peak intensity in less than 1 minute (thunderclap)	
O nset age <5 or >65	New-onset headache before age 5 years New-onset headache after age 65	
P attern change	Progressive headache (evolution to daily headache) or change in headache characteristics	
	Precipitated by Valsalva maneuver	
	Postural aggravation	
P apilledema	n/a	Papilledema
P regnancy	New-onset headache during pregnancy Change in headache during pregnancy	
P henotype of rare headache	Trigeminal autonomic cephalalgia; hypnic; exercise-, cough-, or sex-induced	

HIT-6 Headache Impact Test

- The Headache Impact Test (HIT-6) is a validated Likert-type questionnaire
- typically used to assess the impact of headaches on the quality of life of a symptomatic individual.
- Contains six questions which capture the impact of headaches. Responses and their corresponding relative weights were as follows: ‘never’ (6 points), ‘rarely’ (8 points), ‘sometimes’ (10 points), ‘very often’ (11 points) and always (13).
- The HIT-6 survey score is obtained by simply adding the scores of the six questions. The final HIT score can range between 36 and 78. The larger the score, the greater the impact of symptoms on an individual’s life.

HIT-6™
(VERSION 1.1)

This questionnaire was designed to help you describe and communicate the way you feel and what you cannot do because of headaches.
To complete, please circle one answer for each question.



- 1** When you have headaches, how often is the pain severe?

Never	Rarely	Sometimes	Very Often	Always
-------	--------	-----------	------------	--------
- 2** How often do headaches limit your ability to do usual daily activities including household work, work, school, or social activities?


Never	Rarely	Sometimes	Very Often	Always
-------	--------	-----------	------------	--------
- 3** When you have a headache, how often do you wish you could lie down?

Never	Rarely	Sometimes	Very Often	Always
-------	--------	-----------	------------	--------
- 4** In the past 4 weeks, how often have you felt too tired to do work or daily activities because of your headaches?


Never	Rarely	Sometimes	Very Often	Always
-------	--------	-----------	------------	--------
- 5** In the past 4 weeks, how often have you felt fed up or irritated because of your headaches?

Never	Rarely	Sometimes	Very Often	Always
-------	--------	-----------	------------	--------
- 6** In the past 4 weeks, how often did headaches limit your ability to concentrate on work or daily activities?


Never	Rarely	Sometimes	Very Often	Always
-------	--------	-----------	------------	--------


 COLUMN 1
 (6 points each)


+


 COLUMN 2
 (8 points each)


+


 COLUMN 3
 (10 points each)

+


 COLUMN 4
 (11 points each)

+


 COLUMN 5
 (13 points each)

To score, add points for answers in each column.
Please share your HIT-6 results with your doctor.

Total Score

Higher scores indicate greater impact on your life.

Score range is 36-78.

HIT-6™ US English Version 1.1
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3	When you have a headache, how often do you wish you could lie down?				
	Never	Rarely	Sometimes	Very Often	Always
4	In the past 4 weeks, how often have you felt too tired to do work or daily activities because of your headaches?				
	Never	Rarely	Sometimes	Very Often	Always
5	In the past 4 weeks, how often have you felt fed up or irritated because of your headaches?				
	Never	Rarely	Sometimes	Very Often	Always
6	In the past 4 weeks, how often did headaches limit your ability to concentrate on work or daily activities?				
	Never	Rarely	Sometimes	Very Often	Always



To score, add points for answers in each column.
Please share your HIT-6 results with your doctor.

Total Score
Higher scores indicate greater impact on your life.
Score range is 36-78.

The Power of Intake Surveys

I have had a medical diagnosis of brain injury (stroke, trauma, etc.). My brain injury was _____ years ago.
 I suffered a brain injury without medical diagnosis (see above).
 I have NOT had a previous brain injury (see above).
 year age _____ today's date: _____ your zip code: _____

Please check the most appropriate box, or circle the item number that best matches your observations. All information will be held in confidence. Thank you for your help!

SYMPTOM CHECKLIST Circle a number below:

Please rate each behavior How often does each behavior occur? (circle a number)	Never	Rarely	Sometimes	Frequently	Always
EYESIGHT CLARITY					
Distance vision blurred and not clear — even with lenses					
Near vision blurred and not clear — even with lenses					
Clarity of vision changes or fluctuates during the day					
Blurry night vision / can't see well to drive at night					
VISUAL COMFORT					
Eye discomfort / sore eyes / irritation					
Headaches or dizziness after using eyes					
Eye fatigue / very tired after using eyes all day					
Feel "pulling" around the eyes					
DOUBLING					
Double vision — especially when tired					
Have to close or cover one eye to see clearly					
Point moves in and out of focus when reading					
LIGHT SENSITIVITY					
Normal indoor lighting is uncomfortable — too much glare					
Outdoor light too bright — have to wear sunglasses					
Indoor fluorescent lighting is bothersome or annoying					
DRY EYES					
Eyes feel "dry" and sting					
"Flare" into space without blinking					
Have to rub the eyes a lot					
DEPTH PERCEPTION					
Clumsiness / tripping when objects really are					
Lack of confidence walking / missing steps / stumbling					
Poor hand-eye coordination (spacing, size, lighting)					
PERIPHERAL VISION					
Side vision distorted / objects move or change position					
What looks straight ahead isn't always straight ahead					
Avoid crowds / can't tolerate visually-busy places					
READING					
Short attention span / easily distracted when reading					
Difficulty / slowness with reading and writing					
Poor reading comprehension / can't remember what was read					
Confusion of words / skip words during reading					
Lines blur / have to use finger not to lose place when reading					

Extensive or Overview

2 functions: Symptomology And quantifies

- BIVSS- Brain Injury Visual Symptom Survey
- 6 Clinical trajectories Questionnaire

FOR PATIENT USE FOR OFFICE USE
PT INITIALS / ID _____
DATE _____

Lifestyle Index

This questionnaire is meant to help your doctor understand what you're experiencing on a regular basis — **whether it's caused by your eyes, posture, stress, etc.** Your responses will help make sure you receive the best care possible.

How often do you experience any of these symptoms? Fill in applicable circle. For example: 1 2 3 4 5

Headaches

- You get headaches of any severity each week (even just a dull ache counts).
- Your headaches tend to get worse later in the day.

1 Never	2 Rarely	3 Sometimes	4 Very Often	5 Always
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Additional notes: _____

Stiffness / pain in neck / shoulders

You experience stiffness/tension in your neck/shoulders when you work at a computer read (this might even be from your posture).

1 Never	2 Rarely	3 Sometimes	4 Very Often	5 Always
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Additional notes: _____

Discomfort with Computer Use

Your eyes get tired, burn, or get red easily when you work at a computer for long hours.

1 Never	2 Rarely	3 Sometimes	4 Very Often	5 Always
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Number of hours per day using a digital device: _____

Tired Eyes

Your eyes feel increasingly fatigued/tired as the day goes on.

1 Never	2 Rarely	3 Sometimes	4 Very Often	5 Always
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Additional notes: _____

Dry Eye Sensation

Your eyes progressively feel more dry/sandy/gritty while working at the computer or reading.

1 Never	2 Rarely	3 Sometimes	4 Very Often	5 Always
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Additional notes: _____

Light Sensitivity

Bright / Strong lights (vehicle headlights, fluorescent lights etc.) bother you.

1 Never	2 Rarely	3 Sometimes	4 Very Often	5 Always
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Additional notes: _____

Dizziness

You experience dizziness, motion sickness, or vertigo.

1 Never	2 Rarely	3 Sometimes	4 Very Often	5 Always
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Additional notes: _____

Additional Notes Any additional notes you'd like to add: _____

Kapoor's High Yield Vision Screening/Bedside Assessment, Quick TBI assessment

- Functional Vision and Reading-related
- Have you noticed a change in your vision since your injury?
- Are you more sensitive to light, either indoors or outdoors, since your injury?*
- Have you had any double vision since your injury?*
- Have you noticed any changes in your peripheral vision since your injury?* Is your vision blurry at distance or near since your injury?*
- Have you noticed a change in your ability to read since your injury?
- Do you lose your place while reading more now than before your injury?* How long can you read continuously before you need to stop?
- Do you get headaches during/after reading more now than before your injury?
Do you have more difficulty remembering what you have read now than before your injury?

How to connect the symptoms to the source, *don't ask a question if you don't know what to do with the information*

- . Key Questions:
 - Since how long have you been having headaches?
 - Where in the head does it pain and how does it radiate?
 - How often does the head pain?
 - How long does each attack last? Is it short-lasting or long-lasting?
 - How severe is the pain?
 - What type of pain is it? What is the Nature of the pain?
 - What factors can precipitate or worsen the headache. Are there any triggering or relieving factors?
 - Are there any accompaniments to the head pain?
 - Ask for any visual or sensory aura?
 - Ask if there is just one type or more than one type of headache?
 - Ask if the headache is precipitated or significantly worsened by the Valsalva maneuver? Ask if there is worsening with sexual intercourse? Ask if there is postural worsening?
 - Ask about the personal history, habits and occupation?
 - Ask for a family history of headaches?
 - Ask about the impact of the headache on the patient's lifestyle?
 - Ask about medication overuse?
 - Ask about investigations that have been done so far? And the treatment that has been taken so far?
 - Ask if there is anything else that the patient wants to tell you? Ask if there are any other complaints or medical problems?
- Dealing with the visual symptoms of a patient's headaches.
- "Listen to the Patient quite often he is telling you the Diagnosis!"[4]
- 4. Osler W. Osler's "A Way of Life" and Other Addresses, with Commentary and Annotations. Durham and London: Duke University Press; 2001. [Google Scholar]
- "Is there anything that you wish to tell me which you think I have not asked you?"
- "Patients respond to physicians who respond".
- If you do not know what you are looking for, you are not going to find it.
- "What the mind does not know the eyes are not going to see!"
- If you do not spend time on taking a proper history and just order a battery of tests, this is more like "fishing" for a diagnosis rather than proceeding in a targeted manner.
- Feeling safe versus seeking a true diagnosis and valid treatments
- Not a cookie cutter approach
- Asking the right questions and headache questionnaire

What about TBI and Headaches

Headache is one of the most common symptoms after traumatic brain injury (often called “post-traumatic headache”). Over 30% of people with moderate to severe TBI report having headaches which continue long after injury. An even larger percentage people with mild TBI complain of headache.¹

Vision Anomaly	TBI (%)	Most common anomaly
Accommodation	41.1	Accommodative insufficiency
Versional	51.3	Deficits of saccades
Vergence	56.3	Convergence insufficiency
Strabismus	25.6	Strabismus at near
CN palsy	6.9	CN III

2

Protocol

History *including questions guided by potential red flags*

my favorite question

EOMS

Pupils

Optic Nerve Eval

Photos

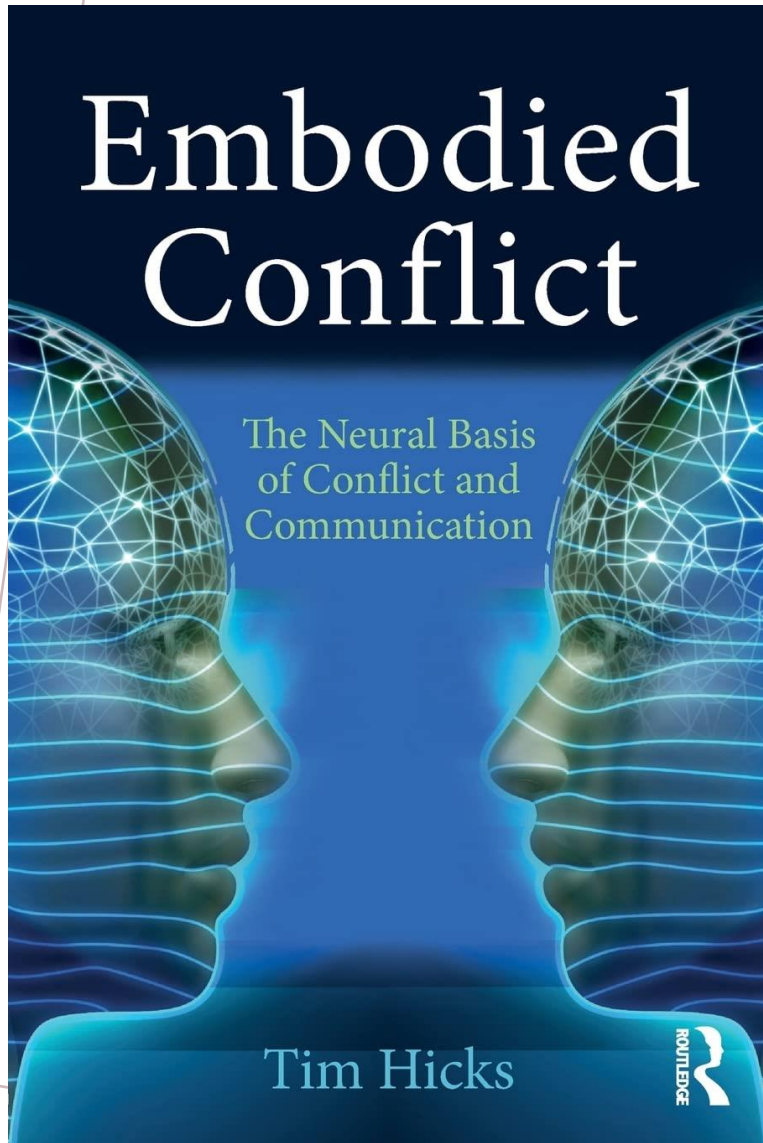
CF/ consider VF

Consider red cap/ color

BV testing

CT, Phorias, - do testing that will guide tx for YOU

Neural Conflict



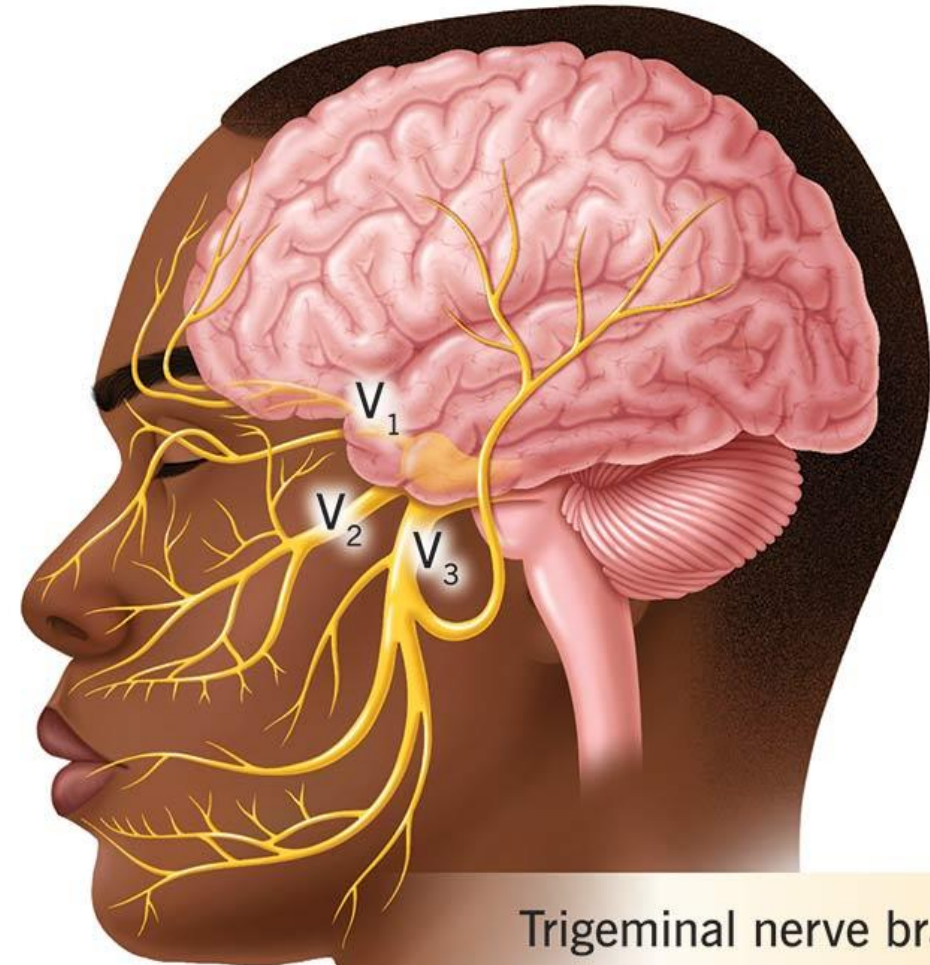


Neurological
Mechanism behind
patient discomfort

Cranial Nerve 5 Trigeminal Nerve

- Confusion
- Conflict
- Neural overload
- The eyes, body and senses don't match
- Result: Increased pain and symptoms

Trigeminal nerve
Cranial nerve V



Trigeminal nerve branches
Ophthalmic nerve (V₁)
Maxillary nerve (V₂)
Mandibular nerve (V₃)

Headache Pain

associated with Vision and Neural conflict



- Proprioceptive fibers in the EOMs provide afferent feedback to the brain about the location of each eye.
- These proprioceptive signals are transmitted through the ophthalmic branch of the trigeminal nerve, which is responsible for detecting sensation and reporting pain.

American Optometric Association (AOA Clinical Care Group). The Effects of Computer Use on Eye Health and Vision. April 1997.

Leigh, R., Zee, D. The Neurology of Eye Movements. The Ocular Motor Periphery.

Weir, C., Journal of Neuro-Ophthalmology. Proprioception in Extraocular Muscles. Vol. 26, No. 2. 2006.

The Vision Council. Digital Eye Strain. Accessed April 2018.

TENSION HEADACHE

- Tightness across forehead, feels like a band squeezing across the head
- Mild to moderate pain
- Tenderness in the scalp, neck, and shoulder muscles
- NO visual disturbances, nausea, or vomiting



Migraine Without Aura

- Unilateral
- Throbbing
- Nausea/vomiting
- Light and sound sensitive
- Worse with activity
- Severe
- Last 4-72 hours untreated
- 15% of population

The idea that dilation of cerebral vessels is a primary cause of migraine pain has been challenged by a variety of evidence. However, the “trigeminovascular system” continues to be widely accepted as an important component of the headache.

Fundamental neurological abnormalities caused by genetic mutations at work in the brain. The **TRESK gene** provides the blueprints for a **potassium ion channel** that is believed to help your nerve cells rest.



Triggers: Complex of **stress**, anxiety, hormonal changes, bright or flashing lights, lack of food or sleep, and dietary substances.

Migraine With Aura

- Fully reversible neurologic symptoms
- Usually last 20-30 minutes
- Symptoms include visual (aura - flashes of light, blind spots, zig zags/geometric patterns), unilateral numbness, unilateral weakness, tingling in the hand/face, and dysphasia
- Differential diagnosis: stroke or retinal tear



HOW CAN I POTENTIALLY HELP REDUCE SYMPTOMS????

- Tints/ Filters
- Help drive best binocularity
 - Refractive error?
 - Prism?
 - Contact lenses?

TINTS/ FILTERS

Long standing favorite FL-41?

Grey-Green?

Blue light?

Selective filters?



Consideration of how much Has
are bothering pt/ aesthetics of
tint



Targeting the intrinsically photosensitive retinal ganglion cell to reduce headache pain and light sensitivity in migraine: A randomized double-blind trial

Charles Posternack^a · Peter Kupchak^b · Amber I. Capriolo^c · Bradley J. Katz^d  

[Affiliations & Notes](#)  [Article Info](#) 



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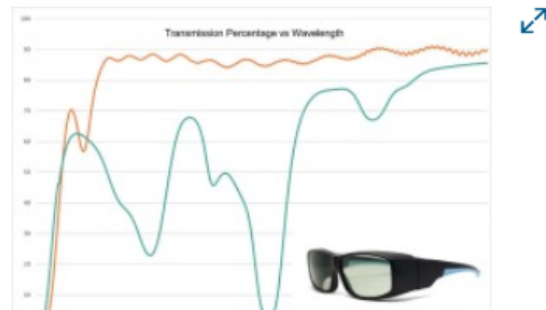


Highlights

Show Outline

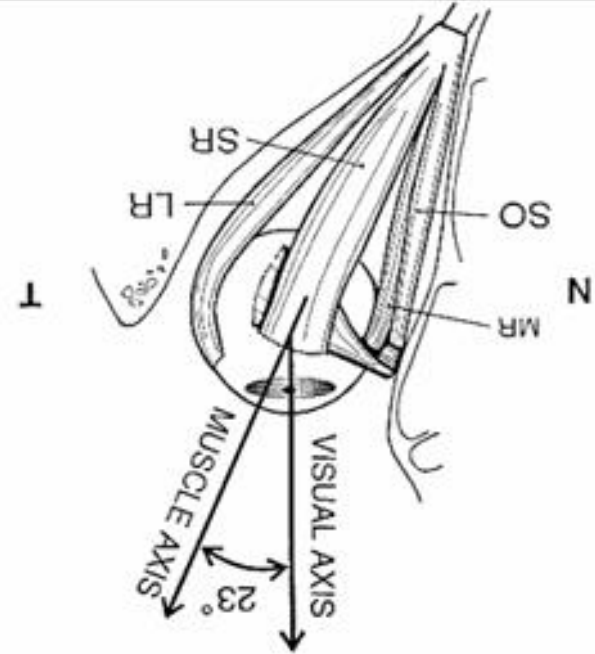
- To improve migraine pain and light sensitivity, we created novel spectacle tints.
- These tints block wavelengths increasing pain and transmit comfortable wavelengths.
- 78 Randomized study subjects wore either control lenses or tinted study lenses.
- Results suggest reduction of migraine-associated pain and light sensitivity.

Graphical abstract



The power of prism

- Changes the relationship of the yoked muscles
- Leverage btw EOM... changes
- Neurological (position sense)... changes
- Tonic discharge between the yoked muscles... changes
- Perceived Location of the object in our periphery... Changes
- **Changes** how our eyes arrive at the next target



Chronic Headache Study, MD Neurology HA Clinic (n=179)

93%

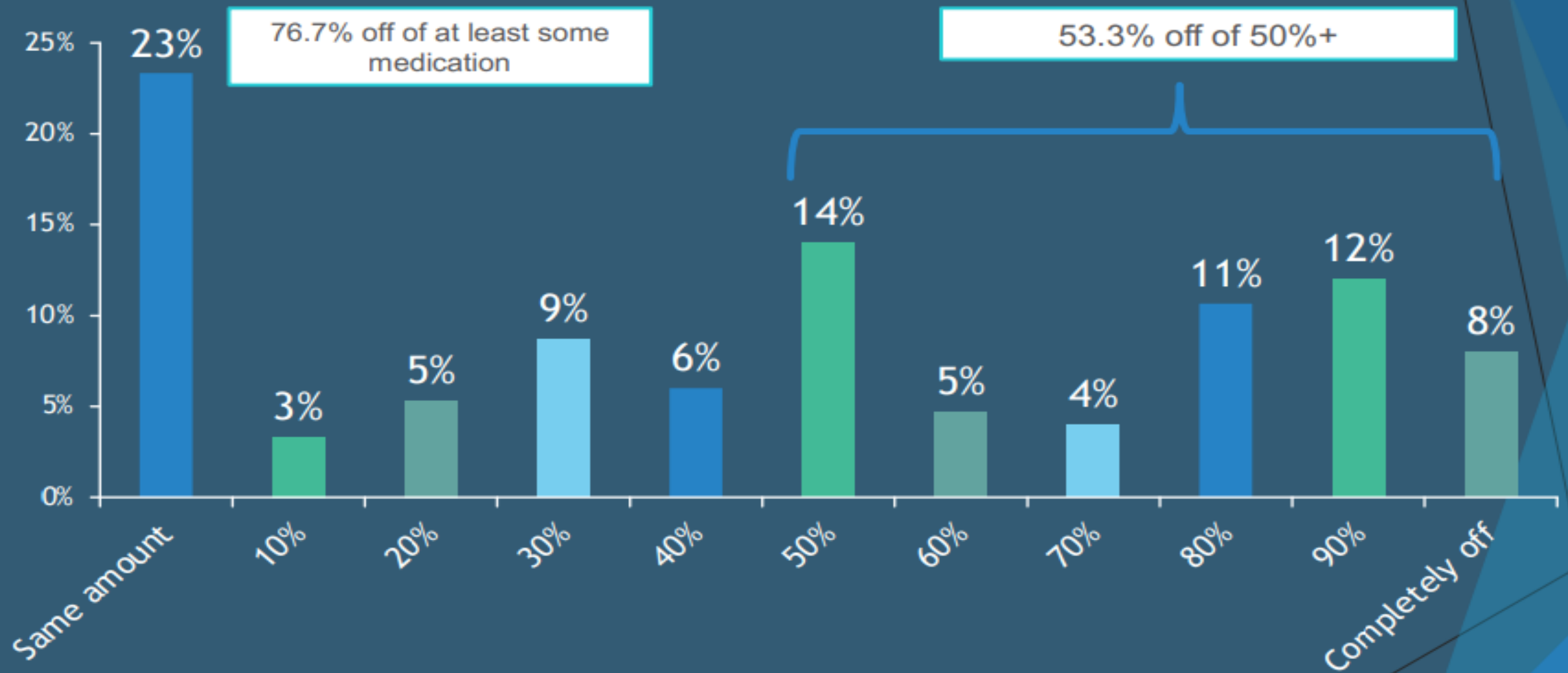
of patients have had a **positive response** to wearing contoured prism

82%

of patients suffering from chronic daily headaches reported their symptoms were **substantially reduced** or “**basically gone**” after wearing contoured prism for 90 days.

Miles, C, Krall, J, Thompson, V, Colvard, M. A New Treatment for Refractory Chronic Daily Headache. The study included 179 patients who suffered from chronic daily headaches and was conducted from September 2012 to June 2013 by Neurology Associates, LLC, and the offices of Dr. Jeff Krall in Sioux Falls, South Dakota.

In your 90 days wearing contoured prism, by how much have you decreased your headache medication usage?



Patient Case Study

Synopsis: 16-year-old female presents with complaints of “shadowy” vision, headaches and eye strain. Saw a neurologist (had MRI) and saw previous doctor (OMD). Everyone said everything is normal. After testing reported double vision at near.

Lifestyle Index:

Headaches	5	
Neck Stiffness	5	
Computer Discomfort	4	
Tired Eyes	3	
Dry Eye Sensation	1	
Light Sensitivity	5	
Dizziness		4

Measurement Device (NMD):

2.15 EXO Distance

10.75 EXO Near

Prescribed: Neurolens SV

-2.25-0.75x177

-2.75-0.75x020

2.0 BI

Results: Patient is doing great and has not been having headaches or double vision. Patient has begun a myopia control protocol and we will explore VT options so she can comfortably wear contacts in the future.

IF THEY DON'T REACH OUT TO YOU, REACH OUT TO THEM!

PsyDs

PCPs

Neurologists

Occupational
Sources

Social media

Eblasts

Website

RESOURCES



Put together a packet



Use the Journal of Ophthalmology article....



<https://www.opthalmologytimes.com/view/treating-traumatic-brain-injury-neuro-optometrically>



Use the Peer Reviewed, double blind HA study



Use your own brochures and cards, testimonials

SUMMARY

- Develop/ borrow a consistent questions list
- Start with your own protocol/checklist
- Be consistent c testing and recording
- Consider treatment/ referrals
- Understand where you want to go
- Start tomorrow!



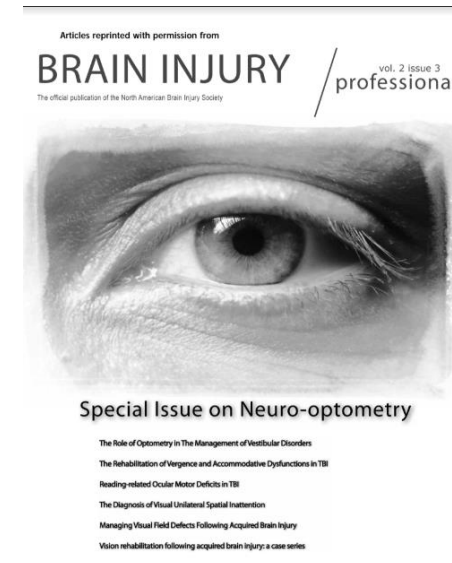
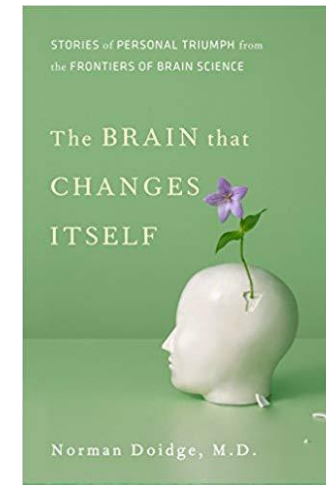
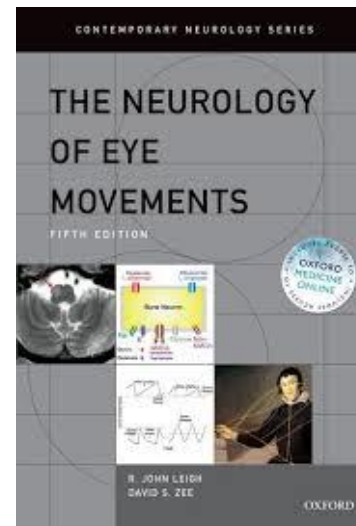
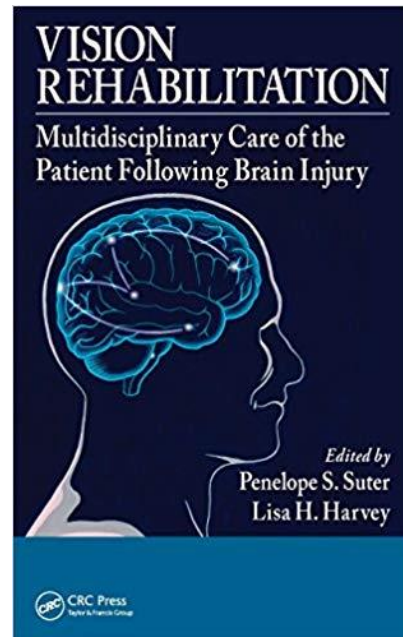
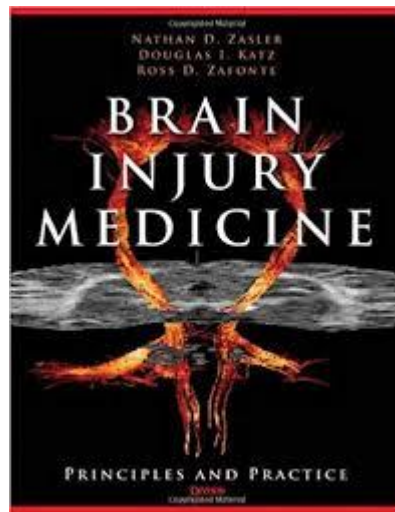
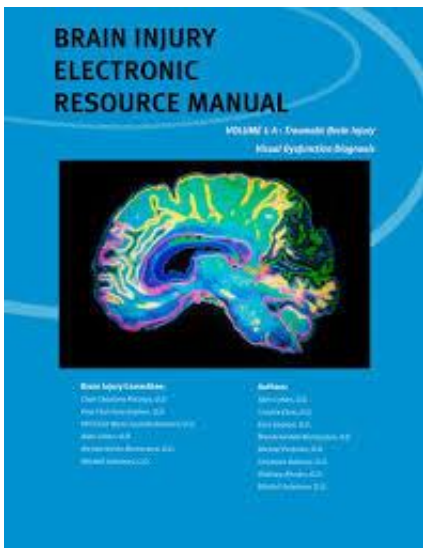
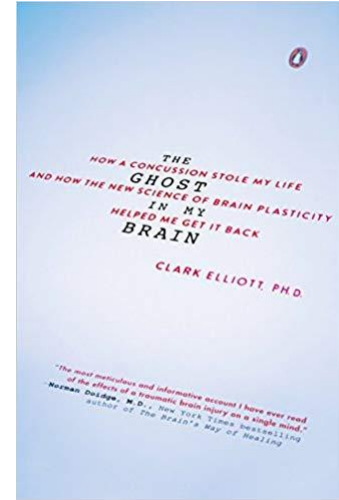
FOREVER A PATIENT, DOCTOR ADVOCATE AND STUDENT

Opened my eyes to how important we are for these patients

Resources:



AOA Vision Rehabilitation
AOA Sports and Performance Vision



THANK YOU



Questions?

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