



Brigham and Women's Hospital

Founding Member, Mass General Brigham

Advances in the Diagnosis and Management of Headache

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DISCLOSURES

Dr. Bernstein consults for Percept and receives research support from Teva Pharmaceuticals.



OBJECTIVES

Understand	Understand evaluation of headache, primary vs. Secondary
Recognize	Recognize Red Flags
Become	Become familiar with whole person headache care
Understand	Understand CGRP as a target
Learn about	Learn about new migraine medications
Review	Review devices
Recognize	Recognize use of integrative therapies



Categories

Primary

migraine

TAC

Secondary

mass

infectious

stroke



Red Flags



New and different



First and worst



Focal features



Ecology of patient

Work-up

Exam

? Imaging

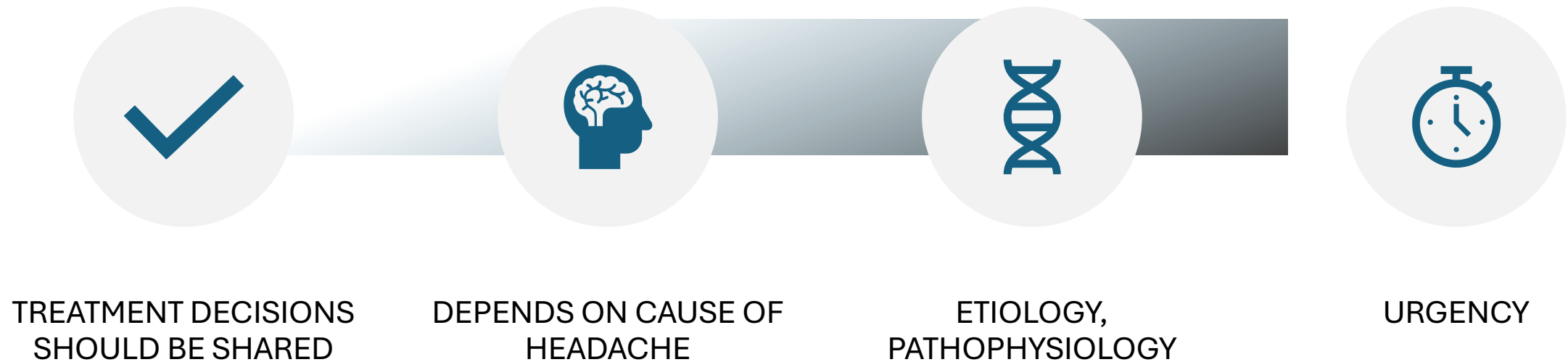
Lab tests

FH

Clinical presentation



Whole Person Headache Care



Migraine

42 million people in US

Women constitute 60 percent of patients

Significant burden of disease



Definition of Migraine

Diagnostic criteria:

At least five attacks¹ fulfilling criteria B-D

Headache attacks lasting 4-72 hr (untreated or unsuccessfully treated)^{2;3}

Headache has at least two of the following four characteristics:

- unilateral location
- pulsating quality
- moderate or severe pain intensity
- aggravation by or causing avoidance of routine physical activity (eg, walking or climbing stairs)

During headache at least one of the following:

- nausea and/or vomiting
- photophobia and phonophobia

Not better accounted for by another ICHD-3 diagnosis.



Screening Girls and Women for Migraine

- **AHS Consensus Dec 2025 : Practice Implications**
- **Screen all women and girls for migraine yearly for migraine**
- **Distinguish migraine with vs. without aura** — critical for contraceptive safety
- All treating clinicians should screen, not just neurologists
- **Screen adolescents early** — migraine often emerges in adolescence

Variants



Aura

Hemiplegic

Acephalgic

Chronic

Assessment

Phenotype description

Frequency

Family history

Neurologic exam

Need for imaging or further work-up

Treatment

- Medication
- Integrative
- both



No biomarkers to
predict response

Ecology of the patient
eg comorbidities,
family planning

Acute Medication vs. Preventive

How to decide?

Often patients need both

Patient's own
desires—*shared
decision making*

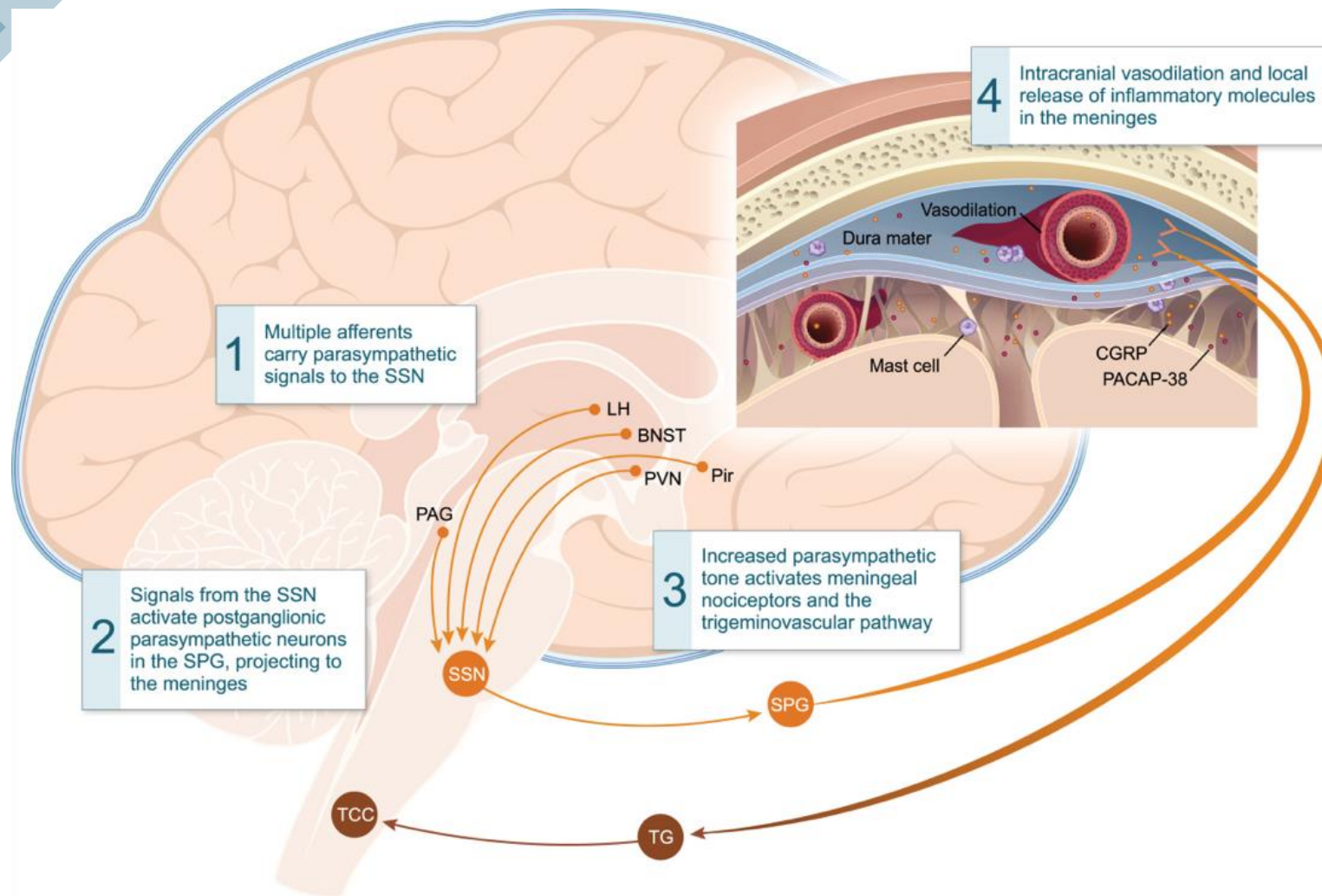
Doesn't have to be binary

CGRP targeting treatments

Why this target?

Where is CGRP?

How does it affect migraine?



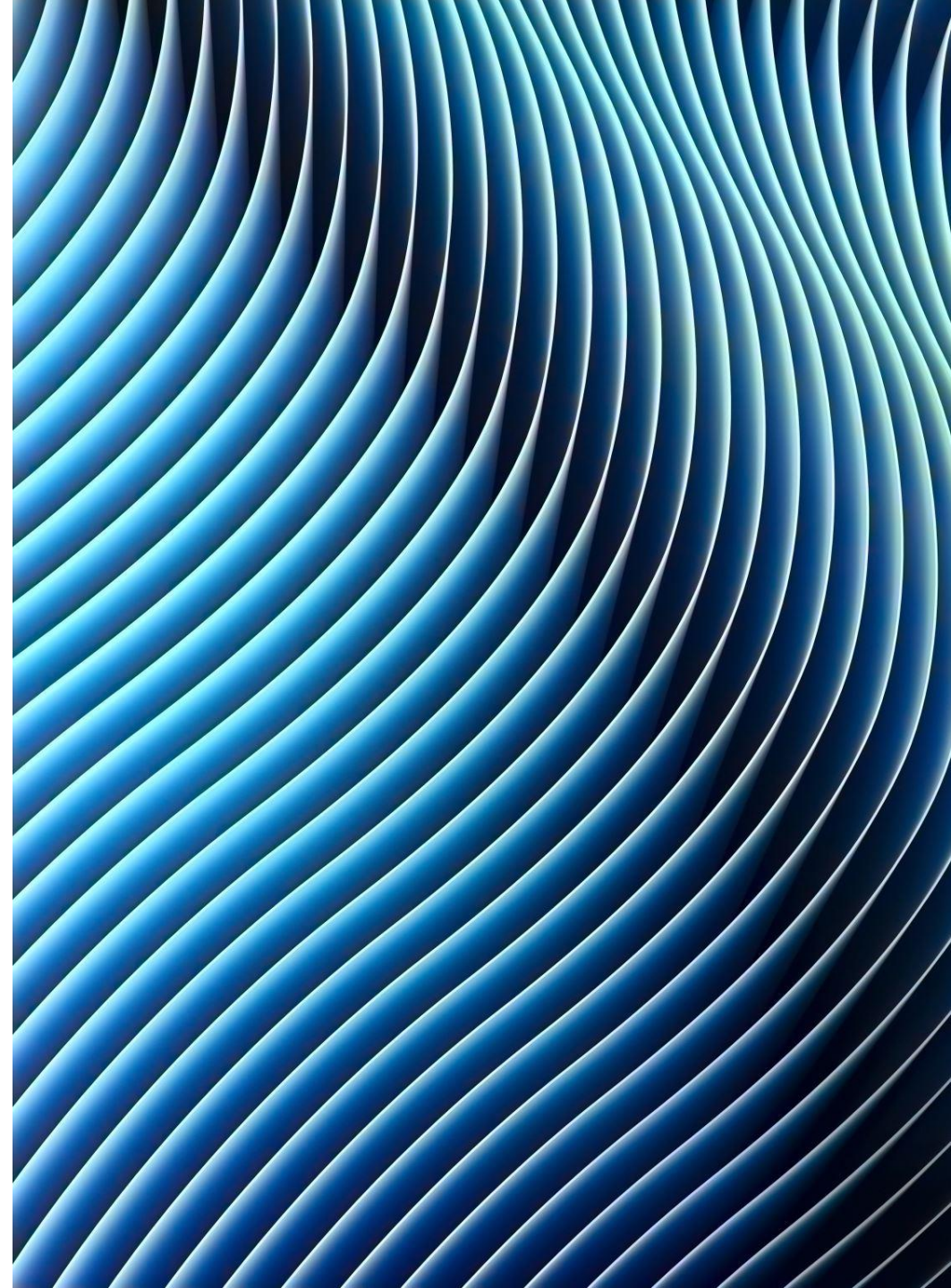
CGRP Monoclonal Antibodies

Erenumab—

Galcanezumab

Fremanezumab

Eptinezumab



Injectables

Side effects

Exclusions

Monitoring

dosing

Gepants-- antagonists

- Atogepant
- Rimegepant



Dosing

Patient
selection

Risk with
contraception

Acute treatments

Gepants-Ubrogepant, zavegepant

Ditans-lasmiditan

New warning
on these
meds

HTN

Raynaud's phenomenon

Not studied for over age
65

TACS

Cluster

SUNCT

SUNA

Hemicrania

Hemicrania

Is the headache
indomethacin
responsive?

Side-locked

Cluster

Galcanazemab
evidenced and approved

300 mg q month

Episodic vs chronic

Non-pharmacologic options

Acupuncture

Craniosacral therapy

Chiropractic care

Mindfulness

Stimulators

Acupuncture

Effect on inflammation

Covered by many insurers

Several treatments but doesn't have to be continuous



Chiropractic

Screen patients

Can help with neck
pain, craniocervial
headache

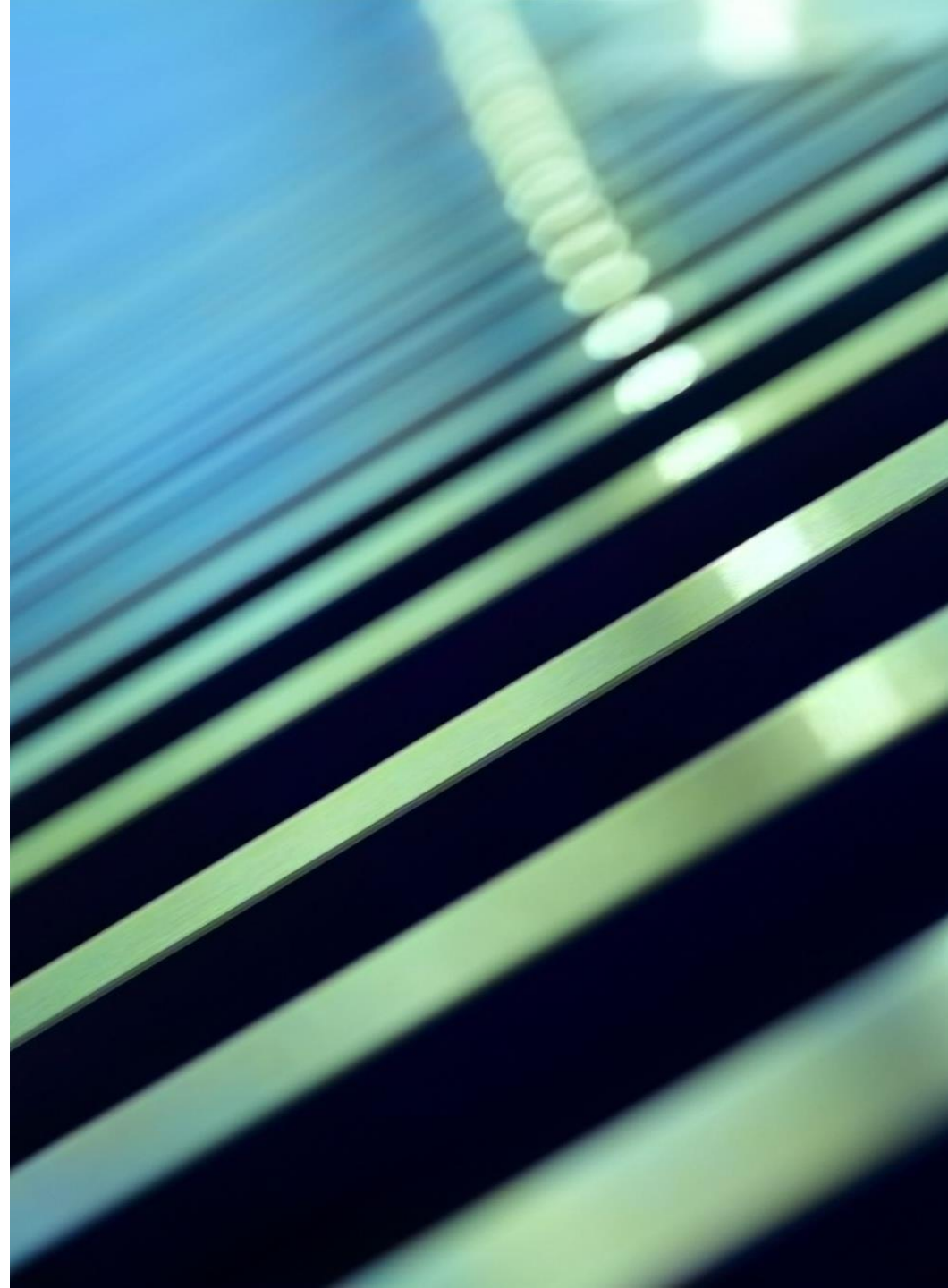
Again, not ongoing

Craniosacral therapy

Regulation of cranial rhythm

Gentle hands on

Not covered



Nutrition

No specific diet

Steady nutrient supply

Hydration

Migraine avoidance: no science to evidence

Mindfulness

Biobehavioral therapies

CBT

MBSR

ACT

Lots of research

Additive perhaps?



Cefaly

Nerivio



Outcomes



Scales



Diaries



Quality
of life

AHS Consensus Guidelines



CGRP targeting medications
as first line for migraine



Shared decision making



Reasonable goals

Potential new targets

PACAP 38 pituitary adenylate cyclase-activating polypeptide

VIP pituitary adenylate cyclase-activating polypeptide

Amylin

Adrenomedullin

NO (nitric oxide)

Others

All in active studies

Summary

- Headache should be diagnosed and classified prior to starting treatment.
- New treatments exist, in particular for migraine, that are targeted, safe and effective.
- Medication should be divided into acute and chronic categories
- Patients need to keep metrics around frequency, treatment and function.
- Consider non-pharma treatments along with medication



References

1. <https://ichd-3.org/>
2. Wattiez AS, Sowers LP, Russo AF. Calcitonin gene-related peptide (CGRP): role in migraine pathophysiology and therapeutic targeting. Expert Opin Ther Targets. 2020 Feb;24(2):91-100. doi: 10.1080/14728222.2020.1724285
3. Jairo Hernandez, Eduardo Molina, Ashley Rodriguez, Samuel Woodford, Andrew Nguyen, Grace Parker, Brandon Lucke-Wold. Headache Disorders: Differentiating Primary and Secondary Etiologies. J. Integr. Neurosci. 2024, 23(2), 43.
<https://doi.org/10.31083/j.jin2302043>

A black and white photograph of a person walking up a long, dark staircase. The person is silhouetted against a bright light source at the top of the stairs, creating a strong lens flare effect. The staircase is flanked by dark walls and railings. In the background, a tall building with many windows is visible, also silhouetted against the bright light. The overall mood is one of achievement and progress.

Tremendous progress!

More to come