

MIGRAINE

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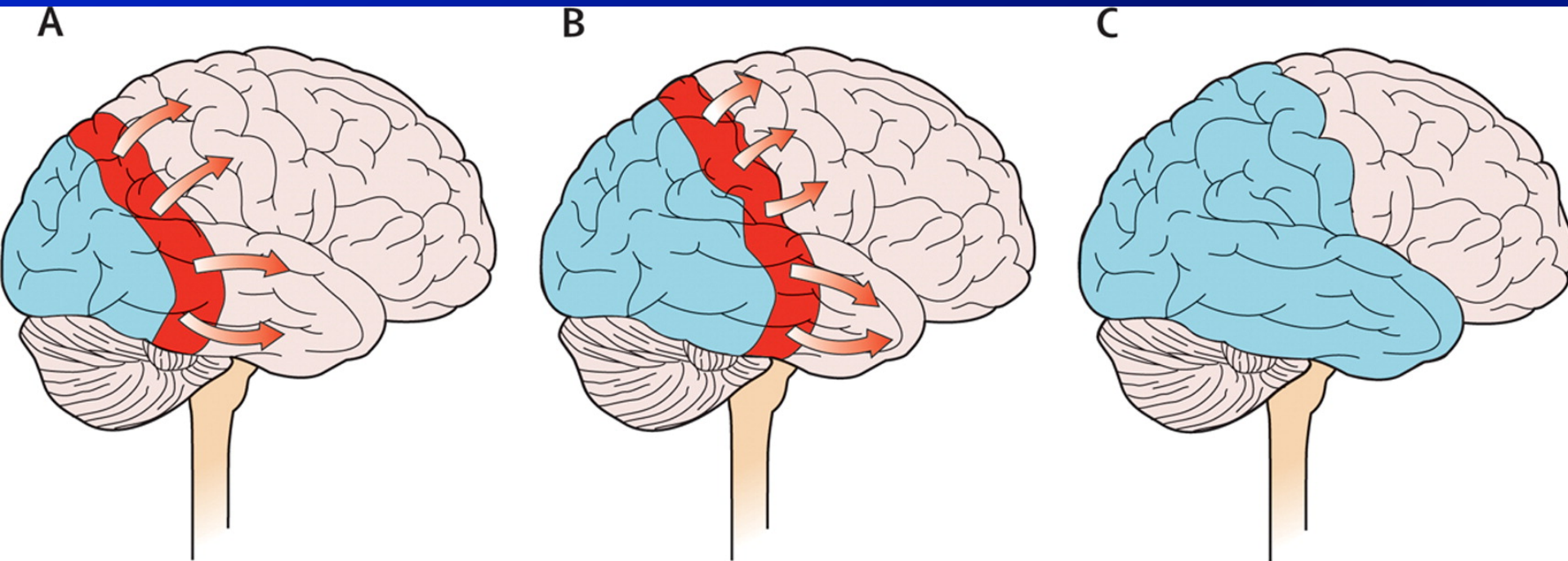
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*“Come from the air or sun
From wine or beer
Any pain in the head
Is cut with Geniol”*



Cortical spreading depression

Serendipitously discovered by Aristides Leão (a long time ago)

MIGRAINE

CLINICAL FEATURES

1. Regularity and cyclical character
2. Prodrome: mood, food cravings, yawning
3. Aura
4. Headache, uni or bilateral, throbbing, 4-72 hours

MIGRANOUS FEATURES

5. Photophobia, phonophobia, nausea and vomiting worsened by exertion

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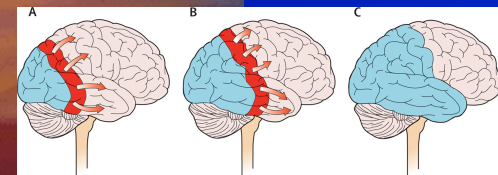
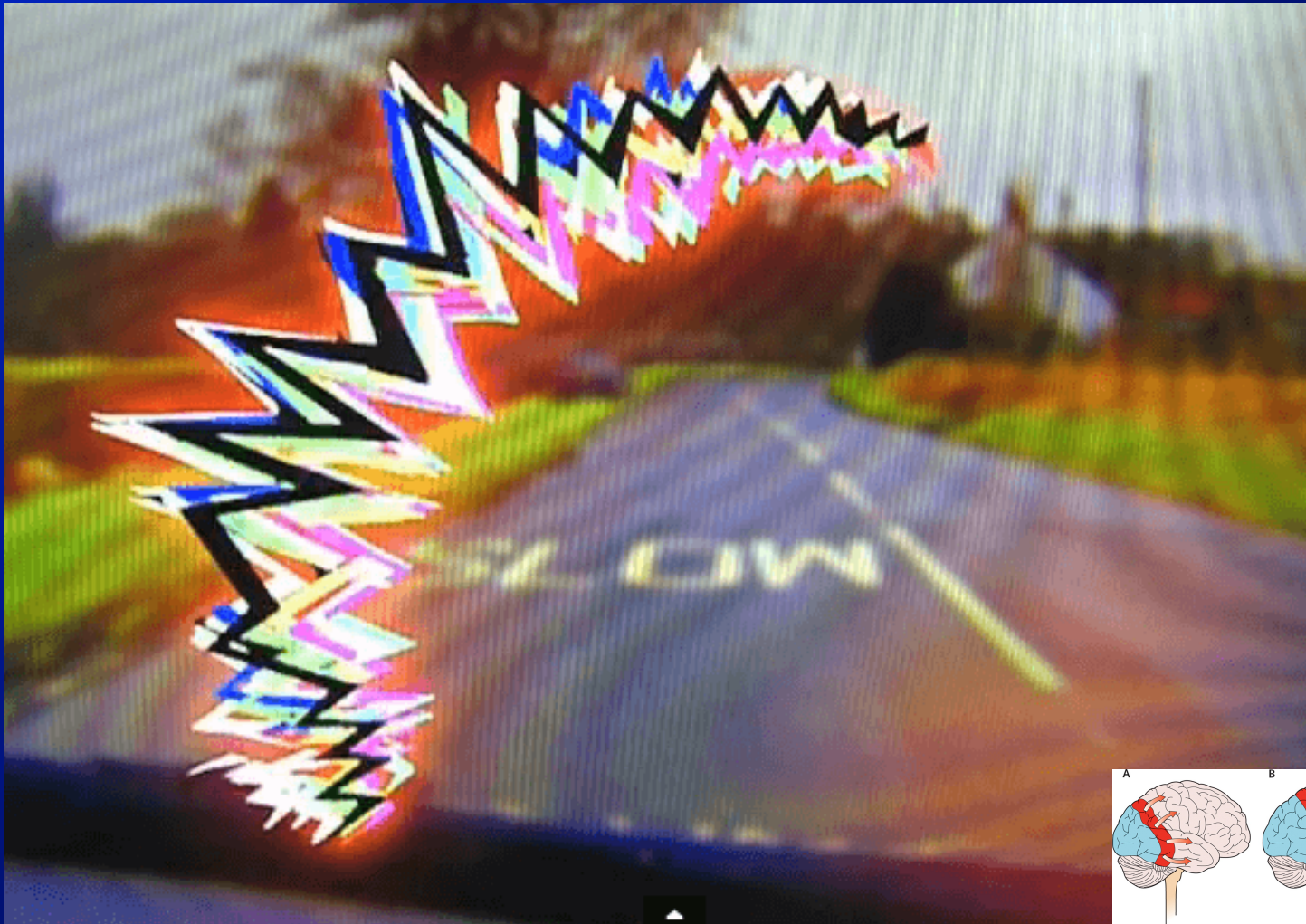
MIGRANOUS FEATURES

5. Photophobia, phonophobia, nausea and vomiting worsened by exertion

MIGRAINE AURA

Visual, hemi-sensory, cognitive, motor

Period of opportunity for treatment



Migraine attack triggers

Often no apparent trigger at all

Sleep and OSA

Fluids: 1.5L/d non-caffeinated, non-fizzy drinks

Food and alcohol

Stress

Scents

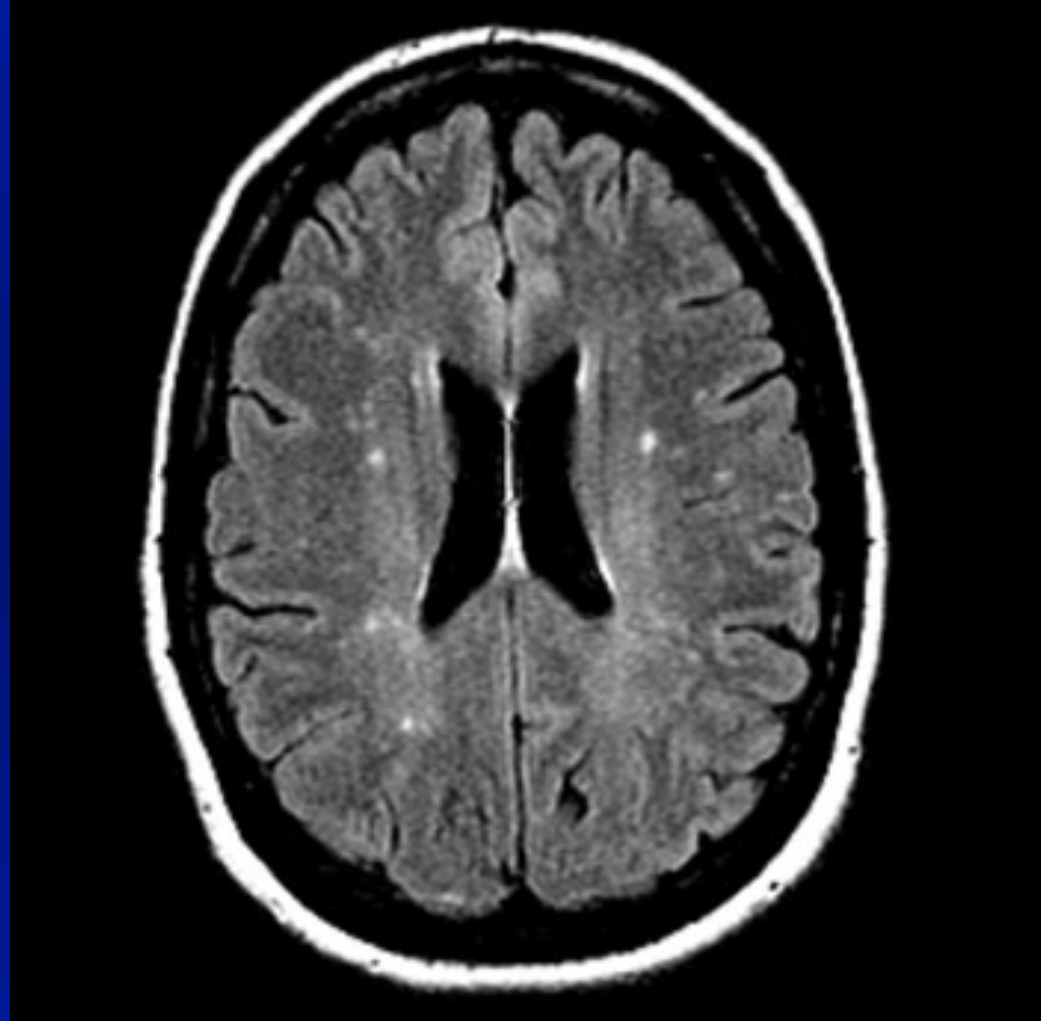
Imaging in Migraine

CT scan and MRI normal

T2/FLAIR hyperintensities

migraine (with aura)
and tobacco

± 2 dots / decade of life
generates anxiety



TREATMENT OF EPISODIC MIGRAINE

“Carry-on” tablets,
to be taken with aura or ASAP

Instruct patient on

- when to repeat tablets
- rebound headache



ACTION PLAN
for migraine attack

1. Panadol 1g
2. Panadol + Metoclopramide
3. Rizatriptan
4. Rizatriptan + Metoclopramide
5. Naproxen 500mg
6. Naproxen + Metoclopramide
7. Rizatriptan + Naproxen
8. Rizatriptan + Naproxen
+ Metoclopramide

Triptan Treatment Pearls:

Sumatriptan, rizatriptan, naratriptan, eletriptan, zolmitriptan

- ◇ 1. The patients are more different than the individual drugs
- ◇ 2. Begin with the highest available dose; dose downwards if side-effects are present
- ◇ 3. Treat early, within the first 40 minutes of headache onset.
- ◇ 4. Treat at prodrome when possible
- ◇ 5. The oral-disintegrating wafers are wholly absorbed in the gut
- ◇ 7. If one triptan doesn't work try another

When to refer to the Emergency Department

Migraine attack >72 hours – **Status migrainosus**

NS 125mL/h

Largactil or Stemetil IV

Parenteral NSAIDs

Antihistamines

Opioids must be avoided

HOWEVER, patients often wary of attending ED due to

- waiting times
- light and noise
- differences in treatment



Menstrual or Perimenstrual Migraines

Can be, in and of itself
a reason to go on preventative medication

IF NOT:

Daily triptans or naproxen 500mg bd
3-5 days preceding bleeding onset

CHRONIC MIGRAINES

previously known as
Transformed Migraines

TREATMENT APPROACH

Mood disorders

Chronic pain and fibromyalgia

Regular exercise

Yoga

Relaxation techniques

Acupuncture

Physiotherapy

Consultations

Psychiatry

Rheumatology

Chronic Pain Team

Coenzyme Q₁₀ 150mg tds, Vitamine B₂ 200mg bd

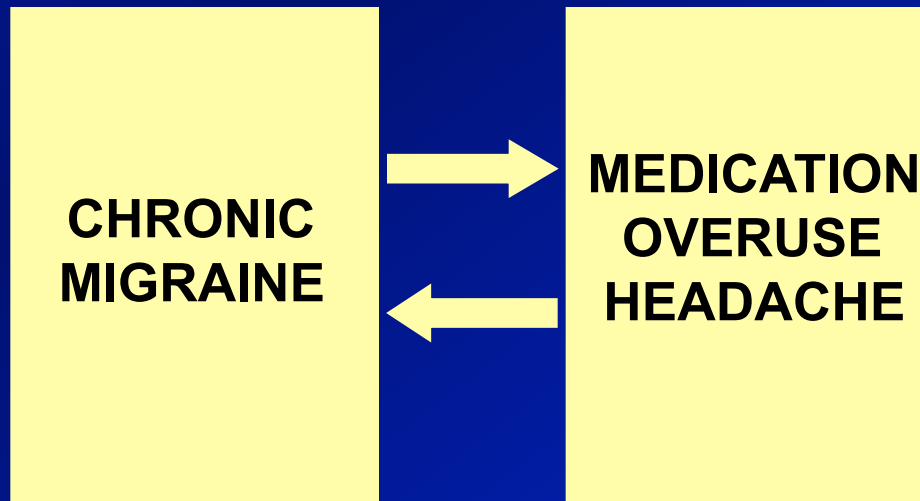
MEDICATION OVERUSE HEADACHE

In *nearly every patient* with chronic migraines

Must be asked in every consultation

Patient education

Avoidance of opioids



CHRONIC MIGRAINES

Common issues seen in preventative treatment

Medication (analgesia) overuse

Small dose of preventative med

Short treatment course

EFFICACY ONLY AFTER AT LEAST 3 MONTHS

CHRONIC MIGRAINES

Preventative treatment

1/3 – PROPRANOLOL and metoprolol

Very first line

Can be used in mild asthma

40 to 160mg day

can be used in pregnancy

Inconvenience: twice daily, hypotension

CHRONIC MIGRAINES

Preventative treatment

2/3 – AMITRIPTYLINE and nortriptyline

Very first line too

When sleep is an issue

10 to 50mg day

can be used in pregnancy

Inconvenience: drowsiness, constipation

CHRONIC MIGRAINES

Preventative treatment

3/3 – TOPIRAMATE

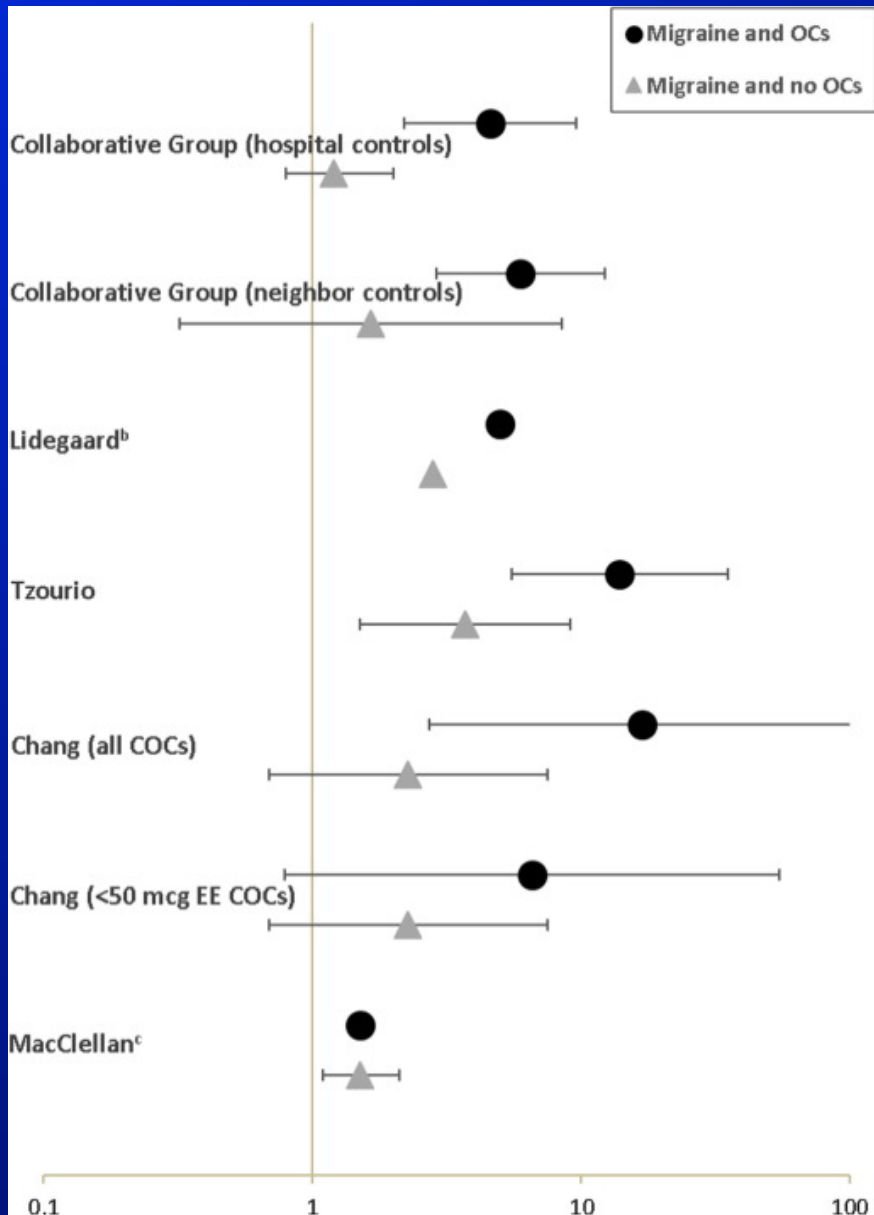
PBS restrictions

Weight loss, concomitant IIH

25 to 100mg day

effective contraception must be discussed

Inconvenience: cognitive difficulties, paraesthesias

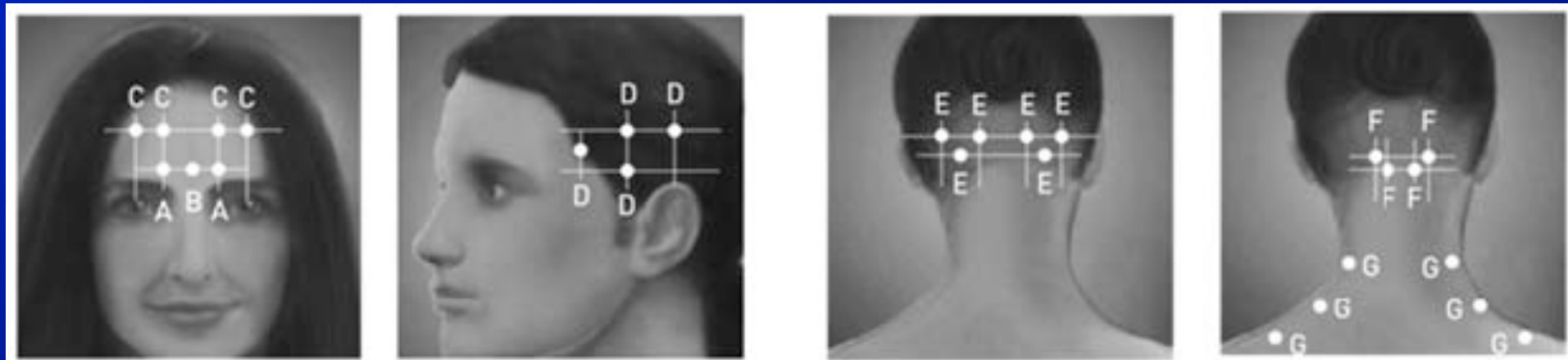


CONTRACEPTION IN MIGRAINE WITH AURA and Stroke Risk

Contentious issue
oestrogen vs. progestogen

Current recommendation:
Progestogen only in migraine with aura

Botulinum toxin



ELIGIBILITY

Chronic migraines

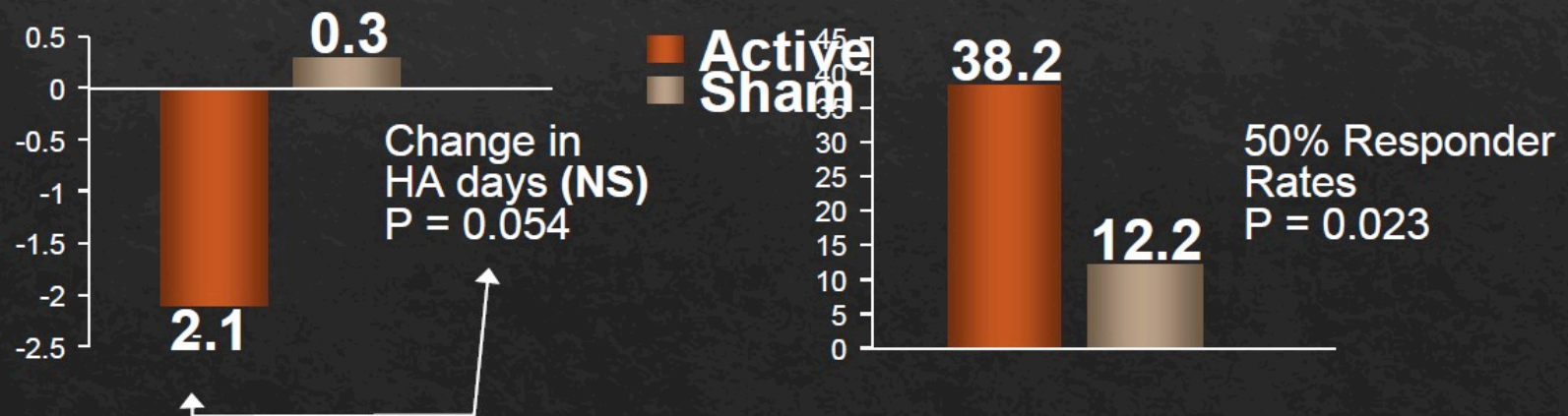
Failed (or contraindicated) 3 preventative agents

Treated every 12 weeks

Transcutaneous Supraorbital Neurostimulator (tSNS)



- ◇ One 67 patient RCT; Turn it on and wear it 20 minutes/day
- ◇ Migraine days/month 3rd mo: **NS** ; $\geq 50\%$ reduction in migraine d/month: (+) for 38.2%
- ◇ Cost: \$349 US + \$35 shipping +3 electrodes/\$30, each last \approx 20 sessions
- ◇ It can be returned within 60 days
- ◇ tSNS received US FDA approval March 2014 as minimal risk device
- ◇ Canada & EU: 3 settings, acute, preventive, relaxation; US just prevention
- ◇ Now in US in the Cefaly II device
- ◇ Level of Evidence: **Level B**, probably effective, based on 1 RCT



Schoenen et al. *Neurology* 2013;80:697-704.
Tepper D. *Headache* 2014;54:1415-6.

Why treatment fails

Medication (analgesics) overuse

Diagnosis (tension-type and cluster headache, IIH)

Sub-therapeutic dosage

Premature discontinuation

Not recognizing comorbid conditions

What to tell patients

There is no “other cause” to the headaches

Migraine is an inherited disorder,

not caused by stress

(but worsened by stress)

Treatment involves lifestyle and meds

There is no cure, and pain comes and goes

in cycles

Thank you !!