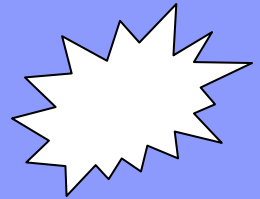


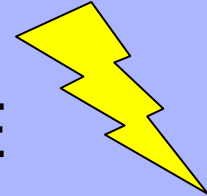
How I Evaluate and Treat Migraine in Primary Care

- Comprehensive history/precipitating factors
- Primary (ICHD-II)
 - Migraine, tension-type, cluster/trigeminal, cough, exertional, post-coital, thunderclap, hypnic (alarm clock H/A), hemicrania continua, daily-persistent
- Secondary
 - head trauma, vascular (TIA, stroke, arteritis, venous thrombosis), non-vascular intracranial (CSF pressure, neoplasms, seizure, post LP's) substance abuse/withdrawal, infections, homeostasis/metabolic, HEENT disorders, cranial neuralgias, psychological

- Determine type of migraine
 - “classic” (with aura), “common” (no aura), ophthalmoplegic, retinal, genetic
- Migraine AURA may occur WITHOUT subsequent headache
- Prodrome/Aura Sxs
 - shimmering and fortification spectra; dizziness and vertigo; sensitivity to noise, light, smells; fatigue; “brain fog”; nausea or vomiting, flu-like symptoms; weakness; numbness
 - May include yawning, eye tearing, nasal congestion, sinus pain, abd pain, chronic vomiting
 - Aura should increase suspicion for PFO/ASD
 - VISUAL & VESTIBULAR symptoms most common with PFO/ASD.



Clinical Approach to Migraine



- **MUST ASSESS RISK FOR STROKE**
 - 50%-60% of “migraines” are associated with septal defects. 1-3% stroke risk/yr with PFO
- Risk factors for embolic stroke with migraine
 - scuba, high altitude exertion (mountaineering, skiing), aerobic exercise/wgt lifting, pregnancy/post-partum, prolonged immobilization (air travel, hospitalization), hypercoagulable states (DVT/prior PE, HRT, BCPs), arrhythmias, atrial septal aneurysm, prematurity, increasing age (PFO/ASD enlarge with age?)

Diagnostic workup

Focused neuro/CV
exam...frequently
unremarkable



Obtain old studies.
EKG, ?EEG, ?LP

TCD ↔ MRI (brain)

If TCD +, get bubble TTE
Neuro and cardio consults

- Laboratory

- CBC/diff, chem panel
- Thyroid fx
- Coags (protein C and S, Factor V Leiden, anticardiolipidin antibody, antithrombin III, prothrombin G20210 mutation, homocysteine
- ESR, ANA
- HIV, VDRL, ?Lyme
- ?drug screen
- Pulse oximetry
- ?Pregnancy/hormone evaluation

Treatment of Migraine

ACUTE (abortive)

aspirin

acetaminophen

NSAIDS

Ergotamines

other non-

opiates

triptans

CHRONIC

anticonvulsants

antidepressants

beta blockers

CCBs

NSAIDS

Minimize opiates

ASD/PFO CLOSURE

Case History

12/06 45 yr overwgt male
chocolate salesman w/
caffeine abuse, occas
migraine w/o aura,
depression, high chol,
HTN, hayfever, FH CVA

12/08-02/09 6wk h/o daily
“band-like” H/A, vertigo,
cognitive sx, imbalance,
trouble finding words

Aggr: odors, sounds,
light, weather changes,
stress (lost job and
Dad)

Allev: +/- triptans,
allegra

- MRI brain T2 spots,
PV/deep white cerebral
hs, bilateral
- TCD 4/5R,5+/5V
- BTTE mod rest, severe
val, unrestricted septal
defect

Expected outcomes post closure include:

- A. Cessation of migraines
- B. Embolic risk reduction
- C. Elimination of aspirin
- D. Clearance for scuba
- E. Unrestricted chocolate

