OH, MY ACHING HEAD!
MANAGING HEADACHE IN THE OUTPATIENT SETTING

OBJECTIVES
- International Headache Society (IHS) Classifications
- Common Headaches
- Medical and Alternative Therapies
- Role of Imaging

IHS CLASSIFICATIONS

PRIMARY HEADACHES
- Migraine
- Tension-Type Headache
- Cluster Headache and other Trigeminal Autonomic Cephalgias
- Other Primary Headache Disorders

SECONDARY HEADACHES
- Headache attributed to...
  - Trauma
  - Vascular / Non-Vascular
  - Substance or Withdrawal
  - Infection
  - Metabolic Disorder

TERTIARY HEADACHES
- Cranial Neuralgias
- Central and Primary Facial Pain
- Other Headaches

I HAVE NO DISCLOSURES OR CONFLICTS OF INTERESTS TO DECLARE
**MIGRAINE HEADACHE**

- Determine if “with aura” or “without aura”
- Lasts 4 - 72 hours
- Descriptive terms:
  - Unilateral
  - Pulsating / Throbbing quality
  - Moderate to severe intensity
  - A/w nausea and/or vomiting
  - Photo / Phonophobia
  - Aggravated with exertional activity

**PATHOPHYSIOLOGY**

- Neurovascular headache
- 5-HT
- Genetic component
- Vulnerability -> Attack Initiation (Triggers) -> Prodrome -> with/without Aura -> Headache -> Resolution -> “Hangover”

**ACUTE TREATMENT**

- Rest
- Analgesics
- Antiemetics
- Triptans
- Ergotamines
- Intranasal Lidocaine 4%

**ACUTE TREATMENT - ANALGESICS**

- OTC Analgesics and NSAIDs
- NSAID combinations (Anacin, Excedrin)
- Barbiturate / NSAID combinations (Fioricet)
- Narcotics
- Tramadol

**ACUTE TREATMENT - ANTIEMETICS**

- Reglan
- Promethazine
- Ondansetron

**ACUTE TREATMENT - TRIPPANTS**

- Almotriptan (Axert): PO
- Eletriptan (Relpax): PO
- Frovatriptan (Frova): PO
- Naratriptan (Amerge): PO
- Sumatriptan (Imitrex / Treximet / Zecuity): PO, nasal spray, SC, transdermal
- Rizatriptan (Maxalt): PO, Dissolving wafer
- Zolmitriptan (Zomig): PO, Dissolving tablet, nasal spray
**MIGRAINE HEADACHE**

- Ergotamine (Ergomar): PO
- Dihydroergotamine (D.H.E. 45 / Migranal): Injectable, intranasal, inhaled (pending FDA approval)

**PROPHYLAXIS**

- Tricyclic Antidepressants
- Anti-Epileptics
- β-Blockers
- Ca2+-Channel Blockers
- NSAIDs
- Botulinum Toxin A
- CAM

**CHARACTERISTICS**

- Lasts 30 minutes to 7 days
- ≥ 2 pain characteristics:
  - Pressing or tightening quality
  - Mild to Moderate intensity
  - Bilateral
  - No aggravation w/ routine activity
- Both:
  - No N/V
  - ≤ 1 of Photophobia or Photophobia

**PATHOPHYSIOLOGY**

- Muscle tension
- Usually absent any signs of serious underlying condition

**TREATMENT**

- Trigger control
- Analgesics +/- Adjuncts
- Trigger point injections
- Botulinum toxin A
- Biofeedback, etc.
- Physical Therapy
- Acupuncture
**PROPHYLAXIS**

- **TENSION HEADACHE**
  - Amitriptyline
  - Venlafaxine
  - Mirtazapine
  - Trigger Point Injections
  - Behavioral Treatment
  - Acupuncture
  - Physical Tx / OMT

**CHARACTERISTICS**

- **CLUSTER HEADACHE**
  - Unilateral in temporal or periorbital area
  - Lasts approx. 15–180 minutes (Untreated)
  - 1 episode QOD to 8 episodes/day
  - Severe pain (“Suicide headache”)
  - Associated Sx:
    - ≥1 ipsilateral Sx in Eye, Nose, or Face
    - Restlessness or Agitation

**TREATMENT**

- **ACUTE CLUSTER HEADACHE**
  - Supplemental Oxygen
  - Triptans
  - Intranasal Lidocaine 4%

- **CHRONIC CLUSTER HEADACHE**
  - Verapamil
  - Lithium
  - Corticosteroids: PO, Trigger point
  - Deep brain stimulation

**TRIGGER POINT INJECTIONS**

- **OCCIPITAL NERVE INJECTION**

**PATHOPHYSIOLOGY**

- **CLUSTER HEADACHE**
  - Vascular dilation
  - Trigeminal nerve stimulation
  - Histamine release
  - Circadian rhythm disturbances
  - Genetics
CLUSTER HEADACHE

- Verapamil
- Corticosteroids
- Topiramate
- Melatonin
- Gabapentin

MEDICATION OVERUSE HEADACHE

- Increased excitability of neurons
- 5-HT mediated

CHARACTERISTICS

MEDICATION OVERUSE HEADACHE (MOH)

- Nearly daily occurrence
- Diffuse or dull
- Usually bilateral
- Headaches worsen as Tx becomes less effective
- Typical offenders:
  - OTC / Rx analgesics, Caffeine, Sedatives, Ergotamines

TREATMENT

MEDICATION OVERUSE HEADACHE

- Stop offending agent
- Counsel patient HA may worsen
- Consider alternative methods of Tx

ROLE OF IMAGING

CT brain:
- Acute
- “Worst headache of my life”
- Post-traumatic

MRI brain:
- New or Chronic w/ or w/o new features and neurologic findings
- 2/2 sinusitis or mastoiditis
- Suspected temporal arteritis, meningitis / encephalitis

IF ONLY IT WERE THIS SIMPLE...
REFERENCES

- International Headache Society. [http://the-classification.org/en/]