



# Headache Update



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# I.H.S. (International HA Society)

## ICHD-2 (International classification of HA disorders)

- Classification of primary headaches. (4 categories)
- Secondary Headaches (8 categories).
- First update in 15 year (January 2004).
- Specific diagnosis, essential for clinical management.
- Accepted standard for HA diagnosis, for clinical practice and research.
- Translated to 22 languages.



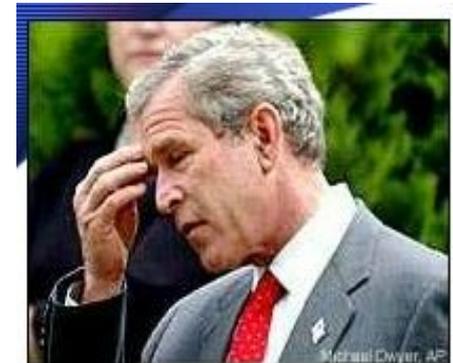


# Primary Headaches

- Migraines
- Tension-type headache (TTH)
- Cluster headaches (CH) and other trigeminal autonomic cephalalgias (TAC's).
- Other primary headaches.

# Secondary Headaches

- Head and or neck trauma.
- Cranial or cervical vascular disorders.
- Non vascular intracranial disorders.
- Substance or it's withdrawal.
- Infection.
- Disorders of homeostasis.
- Disorders of cranium, neck, eye, ear, nose, teeth, mouth, or other facial or cranial structures.
- Psychiatric disorders.



Bush Approval Ratings Drop



# **Cranial neuralgias, central and primary facial pain, and other headaches.**

- Cranial neuralgias, and central causes of facial pain.
- Other headaches, cranial neuralgia, central or primary facial pain.



# Migraine without an aura

- **A.** At least 5 attacks fulfilling criteria B-D.
- **B.** Duration 4-72 Hrs. (untreated).
- **C.** 2 of the following characteristics:
  1. Unilateral location.
  2. Pulsating.
  3. Moderate to severe pain.
  4. Aggravated by physical activity.
- **D.** During the HA, at least one of the following:
  1. Nausea and or vomiting.
  2. Photophobia and phonophobia.
- **E.** **Not** attributed to another disorder.



# Typical aura with migraine headache

- A. At least 2 attacks fulfilling criteria B,C,D.
- B. One of the following without weakness. (reversible)
  1. Visual, positive(lights, spots), negative (vision loss)
  2. Sensory, pos. (pins and needles) neg. (numbness)
  3. Dysphasic speech disturbances.
- C. 2 of the following:
  1. Homonymous visual or unilateral sensory symp.
  2. At least 1 or different aura symptom >5minutes.
  3. Symptoms >5min <60 min.
- Headache onset during or following the aura within 1hr.
- Not attributed to another disorder.



## Migraine types

- Migraine **without** an aura, 5 attacks required. 4-72hrs. >1hr. In children.
- Migraine with an aura (micropsia, metamorphosia in kids)
  1. Familial hemiplegic migraine. (24 hrs. hemi. Cerebellar ataxia 20%) Linked to chromosome 1 & 19 or neither. “Sporadic” if no family history.
  2. **Basilar-type migraine:** Aura symptoms of a posterior fossa lesion (vertigo, dysarthria, tinnitus, ataxia, bilateral sensory or visual symptoms, or changes in mental status.



## Migraine types (2). Childhood periodic syndromes:

- **Cyclical vomiting:** (2.5% of all school kids.)  
Recurrent vomiting, 1hr to 5 days, >4 vomit. /hr.  
Well interictally. No other GI cause.
- **Abdominal migraines:** In 12% of children with recurrent attacks of abd. pain, anorexia, nausea, (vomiting). Pain is periumbelical or diffuse.  
Other causes excluded.
- **Benign paroxysmal vertigo:** >5 attacks of severe vertigo lasting min. to hrs. other causes excluded.



## Migraine types (3)

- **Retinal migraine:** (rare) > 2 attacks of reversible scintillation, scotoma or blindness in **only one eye**, followed within < 1hr by a migraine. r/o, TIA, optic neuropathy and retinal detachment. Retinal **infarctions** common
- **Complication of migraines:**
  1. Chronic migraines:> 15 HA's/ month >3 month. (without medication overuse >10d/mo. For combination medications or >15 d/mo. For simple analgesics.)
  2. Status migrenosus: >72 hrs. must be debilitating.
  3. Persistent aura without infarction > 1 week.
  4. Migrainous infarction: In typical aura distribution.
  - 5.**MIGRALEPSY:** Epilepsy triggered by migraine
- **Probable migraine:** Not all criteria for migraines are met.



# Tension type headaches: (TTH)

The most common type of primary HA (50-74%)

- Duration: 30 min to 7 days
- At least two of the following:
  1. Bilateral location.
  2. Non-pulsating.
  3. Mild-moderate,
  4. Not aggravated by routine physical activity.
- Both of the following:
  1. No nausea or vomit.
  2. Photo. or phonophobia, not both
- **EPISODIC TTH:** < 12/year > 10 total.
- **Frequent ETTH:** >1 <15/ month ,for > 3 month. >12/ yr.
- **Chronic TTH:** >15 / month > 3 m. > 180/ yr.



# Cluster HA and other trigeminal autonomic cephalalgias.

- **Cluster HA:** Unilateral, intermittent, short(15-180min), sharp, excruciating, with autonomic dysfunction.
  1. Episodic CH: clusters of 7d-1yr, then no HA >1mo.
  2. Chronic CH: >1yr without remission.
- **Paroxysmal hemicrania:** >5/day 2-30min. Severe, unilateral, (orbital, supraorbital, temporal) with ipsilateral parasympathetic activation. Responds to indomethacin.  
Chronic or episodic.
- **Short lasting unilat. neuralgiform HA attacks with conjunctival injection and tearing:**3-200/d, 5-240 sec. (SUNCT syndrome).
- **Probable trigeminal autonomic cephalalgias:**



## Other primary headaches:

- Primary stabbing HA:
- Primary cough HA:
- Primary exertional HA:
- Primary HA associated with sexual activity:
- Hypnic HA:
- Primary thunderclap HA:
- Hemicrania continua:
- New daily persistent HA:

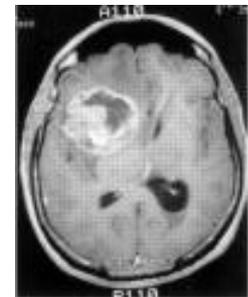


# Red flags in the diagnosis of HA

- **Sudden onset:** SAH, bleeding AVM, post. fossa lesions
- **Worsening pattern HA:** mass, SDH, medication overuse
- HA with **fever**, rash, neck stiffness: infection, AI, arteritis
- **Focality:** mass, AVM, AI
- **Papilloedema:** mass, I.I.C.P, encephalitis, meningitis.
- Triggered by **cough:** SAH, mass, Chiari 1
- During / post pregnancy: DST, pineal apoplexy, c.a. diss.
- New HA in patients with- **cancer:** Metastasis
  - **Lyme dis.:** meningoencephalitis
  - **HIV:** opportunistic infection, tumor

# Evaluation of headaches

- History
- Physical examination
- Special testing
- Headache calendar



JANUARY 2005						
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				



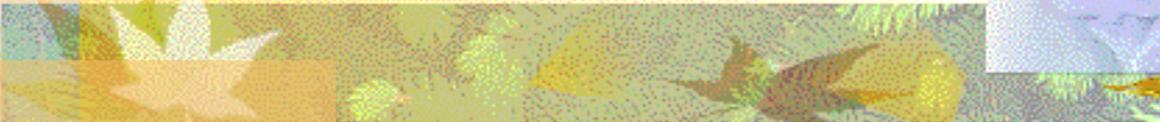
# Abortive treatment

- OTC analgesics
- Combination medications
- Triptans
- DHE
- Narcotics
- 100% O<sub>2</sub>



# Triptans

1. **December 28, 1992:** sumatriptan (**Imitrex<sup>®</sup>**, **Imigran<sup>®</sup>**) injections
2. **June 1, 1995:** sumatriptan (**Imitrex<sup>®</sup>**, **Imigran<sup>®</sup>**) tablets
3. **November 25, 1997:** zolmitriptan (**Zomig<sup>®</sup>**) tablets
4. **August 26, 1997:** sumatriptan (**Imitrex<sup>®</sup>**, **Imigran<sup>®</sup>**) nasal spray
5. **February 10, 1998:** naratriptan (**Amerge<sup>®</sup>**, **Naramig<sup>®</sup>**) tablets
6. **June 29, 1998:** rizatriptan (**Maxalt<sup>®</sup>**) tablets and rizatriptan orally dissolvable (**Maxalt-MLT<sup>®</sup>**) tablets
7. **February 13, 2001:** zolmitriptan orally dissolvable (**Zomig-ZMT<sup>®</sup>**) tablets
8. **May 7, 2001:** almotriptan (**Axert<sup>®</sup>**) tablets
9. **November 8, 2001:** frovatriptan (**Frova<sup>®</sup>**) tablets
10. **December 27, 2002:** eletriptan (**Relpax<sup>®</sup>**) tablets



# Prophylaxis

- Diet
- Structured routine
- Elimination of analgesics overuse
- Vitamin B2 400mg/day
- Relaxation and biofeedback
- Prophylactic medications



# HA Prophylaxis

## I. **Beta-blockers:**

- Propranolol (Inderol)
- Timolol
- Nadolol
- Metoprolol
- Atenolol

## I. **Antidepressants (tricyclics):**

- Amitriptyline (Elavil)
- Nortriptyline (Pamelor)
- Doxepin
- Imipramine
- Protryptiline

## I. **Antidepressants (SSRI):**

- Fluoxetine (Prozac)
- Paroxetine (Paxil)
- Sertraline (Zoloft)
- Fluvoxamine (Luvox)



# HA Prophylaxis (continue)

**I. Monoamine oxidase inhibitor**

**II. Other antidepressants:**

- Bupropion
- Trazodone
- Venlafaxine

**VI. Antiepileptics:**

- Valproic acid (Depakote):
- Carbamazepine (Tegretol)
- Gabapentin (Neurontin)
- Topiramate (Topamax)
- Tiagabine (Gabitril)

**XII. NSAIDs:**

- Aspirin
- Ibuprofen
- Naproxen

**I. Serotonin antagonists:**

- Cyproheptadine (Periactin)
- Methysergide

**II. Calcium channel blockers:**

- Nimodipine
- Verapamil
- Diltiazem

# Conclusion



**Childbrain.com**

The Pediatric Neurology Site



**Headaches**

**MICEREBRO.COM**

Sitio de Neurología Pediátrica



**Dolores de Cabeza**