Headache Update

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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.
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 >5 minutes.
   3. Symptoms >5 min <60 min.

- Headache onset during or following the aura within 1 hr.
- 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 interichtally. 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 (15-180 min), 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 2-30 min. 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
Abortive treatment

- OTC analgesics
- Combination medications
- Triptans
- DHE
- Narcotics
- 100% O2
Triptans

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

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

1. **Beta-blockers:**
   - Propanolol (Inderol)
   - Timolol
   - Nadolal
   - Metoprolol
   - Atenolol

1. **Antidepressants (tricyclics):**
   - Amitriptyline (Elavil)
   - Nortriptyline (Pamelor)
   - Doxepin
   - Imipramine
   - Protryptyline

1. **Antidepressants (SSRI):**
   - Fluoxetine (Prozac)
   - Paroxetine (Paxil)
   - Sertraline (Zoloft)
   - Fluxaminie (Luvox)
HA Prophylaxis (continue)

I. Monoamine oxidase inhibitor
II. Other antidepressants:
   - Bupropion
   - Trazodone
   - Venlafaxine

VI. Antiepileptics:
   - Valporic 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