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Migraine Diagnosis and Treatment

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Migraine Diagnosis and Treatment

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Diagnostic Criteria

A. At least 5 attacks fulfilling criteria B through D
B. Headache attacks lasting 4 to 72 hours (untreated or unsuccessfully treated)
C. Headache has at least two of the following characteristics:
   1. Unilateral location
   2. Pulsating quality
   3. Moderate or severe pain intensity
   4. Aggravation by or causing avoidance of routine physical activity
      (ie. walking or climbing stairs)
D. During headache at least one of the following:
   1. Nausea and/or vomiting
   2. Photophobia and/or Phonophobia
E. Not attributed to another disorder
Pillars of Acute Migraine Treatment

• NSAIDs (IV Ketorolac, Ibuprofen, Diclofenac)
• Neuroleptics (Reglan, Compazine, Droperidol, Thorazine, Haldol)
• Migraine specific (DHE, Triptans)
Additional Considerations

- Steroids (Methylprednisolone, Dexamethasone)
- Anticonvulsants (Valproic Acid, Levitiracetam)
- Magnesium Sulfate
Opioids

- In almost all cases of primary headache, **Opioids must be avoided!**
- Most primary headache disorders are made worse by Opioid exposure
New Treatments??
Population-Based Study

- Acute Migraine Medications and Evolution From Episodic to Chronic Migraine: A Longitudinal Population-Based Study
- Marcelo E. Bigal, MD, PhD; Daniel Serrano, MA; Dawn Buse, PhD; Ann Scher, PhD; Walter F. Stewart, PhD; Richard B. Lipton, MD
Compounds containing barbiturates and opiates were associated with a twofold increased risk of TM in 2006 vs. maintaining an episodic migraine status (barbiturates OR = 2.06, 95% CI = 1.3-3.1; opiates OR = 1.98, 95% CI = 1.4-2.8)
Admission

- Avoid PRN medications during admission
Abortive and Preventative Treatments
Abortive Medications

- **Triptans**
  - Almotriptan (Axert)
  - Eleetroptan (Relpax)
  - Frovatriptan (Frova)
  - Naratriptan (Amerge)
  - Rizatriptan (Maxalt)
  - Sumatriptan (Imitrex)
  - Zolmitriptan (Zomig)
  - Sumatriptan/Naproxen (Treximet)
Preventative Treatments

- Antihypertensives
- Antidepressants
- Antiepileptics
Evidence-based guideline update:

Treatment for episodic migraine prevention
Level A: Established Efficacy

- Antiepileptic drugs: Divalproex sodium, Topiramate
- Beta-blockers: Metoprolol, Propranolol, Timolol
- Triptans (MRM): Frovatriptan
Level B: Probably Effective

- Antidepressants: Amitriptyline, Venlafaxine
- Beta-blockers: Atenolol, Nadolol
- Triptans (MRM): Naratriptan, Zolmitriptan
Level C: Possibly Effective

- ACE inhibitors: Lisinopril
- Angiotensin receptor blockers: Candesartan
- Alpha- Agonists: Clonidine, Guanfacine
- Antiepileptic drugs: Carbamazepine
- Beta-blockers: Nebivolol, Pindolol
- Antihistamines: Cyproheptadine
Level U: Inadequate or Conflicting Data

- Carbonic anhydrase inhibitor: Acetazolamide
- Antithrombotics: Acenocoumarol, Coumadin, Picotamide
- Antidepressants: Fluvoxamine, Fluoxetine, Protriptyline
- Antiepileptic: Gabapentin
- Beta-blockers: Bisoprolol
- Ca blockers: Nicardipine, Nifedipine, Nimodipine, Verapamil
- Direct vascular smooth muscle relaxants: Cyclandelate
Other Medications Possibly or Probably Ineffective

- Lamotrigine (Level A negative)
- Clomipramine (level B negative)
- Acebutolol (level C negative)
- Clonazepam (level C negative)
- Nabumetone (level C negative)
- Oxcarbazepine (Level C negative)
- Telmisartan (level C negative)
Evidence-based guideline update:

NSAIDs and other complimentary treatments for episodic migraine prevention
Level A: Established Efficacy

- Herbal: Butterbur
Level B: Probably Effective

- NSAIDs: Fenoprofen, Ibuprofen, Ketoprofen, Naproxen
- Herbal/ minerals: Magnesium, feverfew, Riboflavin
- Histamines: Histamine SC
Level C: Possibly Effective

- NSAIDs: Flurbiprofen, Mefenamic Acid
- Herbal/ minerals: CoQ10, Estrogen
- Antihistamines: Cyproheptadine
Level U: Inadequate or Conflicting Data

- NSAIDs: Aspirin, Indomethacin
- Herbal/ minerals: Omega-3
- Other: Hyperbaric Oxygen
Other: Established Possibly or Probably Ineffective

- Leukotriene receptor antagonist: Montelukast (level B negative)
Chronic Migraine

- Treatment
  - Botox
In Summary:

- Acute treatment of intractable headache should include NSAIDs, Neuroleptics, and Migraine specific medications.
- Opioids and Barbiturates make primary headache disorders worse.
- Preventive medications should be considered.