Headaches and Kids

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Overview

• Headache classifications and diagnosis
• Address common headache myths
• Recommendations for headache treatment and reducing disability
Headaches In Children

- Third most common reason for school absence.  
  (Newacheck 1992)

- 12% of American adolescents miss a day of school a month due to headaches  
  (Fenichel 2001)
Headaches In Children
(Lewis 2002)

Migraine Prevalence:
- 1.2% to 3.2% in 3 to 7 year olds
- 4% to 11% in 7 to 11 year olds
- 8% to 23% in 11-15 year olds
Headaches In Children
(Lewis 2002)

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Prevalence of any type of headache:
- 37% to 51% in 7 year olds
- 57 to 82% by age 15
Secondary Headaches
Secondary Headaches In Children

- Cerebral Tumors
- Intracranial hypertension (pseudotumor cerebri)
- Infectious
- Vascular
- Substance Abuse
- Carbon Monoxide
- Hypertension
- Post-Traumatic
- Ocular
- Constipation
Secondary Headaches: Cerebral Tumors

- 2.4 per 100,000 children under 15 years of age
- 62% of children with a brain tumor will have a headache
- Less than 1% will present with headache alone
- More than half of children with brain tumors will have five or more neurological deficits

Secondary Headaches: Ocular

- Controversial
- Children frequently are referred to eye clinics for headaches
- Pain is typically behind eyes, absent in the morning, mild in nature, relieved with eye rest
- Proper correction will improve headaches in over 70% of headaches related to refractive errors

Sinus Headache

- Over 80% of “sinus” headaches meet IHS criteria for migraines
- Chronic sinus disease is not a common cause for headaches
- Weather changes are a top trigger of migraines
- Migraines can be cause nasal congestion and be relieved by “sinus headache” medications.
Diagnosis of headaches

- Relies upon history and physical
- Imaging and laboratory work is often not necessary
- Reassurance of benign nature of headaches is high importance
Primary Headaches
Primary Headaches in Children

- Migraines with and without aura
- Tension Type Headaches
- New Daily Persistent Headache
- Chronic Daily Headache
- Childhood periodic syndromes that are commonly precursors of migraine (migraine variants)
Primary Headaches in Children

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IHS-II
Classification Of Migraine

Lasts 1 or more hours if untreated, often up to 72 hours
IHS-II
Classification Of Migraine

- Lasts 1 or more hours if untreated
- Moderate to severe headache
- Worse with movement
- Throbbing
- Unilateral (kids have bilateral headaches)
IHS-II Classification Of Migraine

- Lasts 4 or more hours if untreated
- Moderate to severe headache
- Worse with movement
- Throbbing
- Unilateral
- Photophobia and phonophobia
- Nausea and/or vomiting
Diagnosis Of Migraine

- Only 15% associated with auras
- Often preceded by neck pain
- Associated with allodynia
Headache Myths
Myth 1

- Migraine headaches are caused by blood vessel changes.
Myth 1

- Migraine headaches are caused by blood vessel changes.
- Blood vessel changes can occur in migraines but the prominent pathophysiology is destabilization of cortical neurons.
- More similar to epilepsy than stroke.
Myth 2

- Most adolescents with daily headaches have depression or anxiety.
Psychiatric Co-Morbidities in Adolescent Chronic Daily Headache

- 21% Major Depression
- 19% Panic Disorder
- 20% Current High Suicide Risk
- Most correlated to migraine with aura

Myth 3

Food allergies are a common cause of headaches
Myth 3

- Food allergies are a common cause of headaches
- Food may trigger headaches but it is not an allergic process
Diet and Migraine

- Controversial
- Difficult to prove
- Common triggers
  - Nitrates
  - MSG
  - Citrus Fruits
  - Chocolate
  - Cheeses
  - Nuts
Myth 4

If stress clearly causes a headache, it is more likely to be a tension type headache.
Myth 4

- If stress clearly causes a headache, it is more likely to be a tension type headache.
- Mild tension headaches and severe migraines can both be triggered by stress.
Myth 5

 Pain can be accurately assessed by observation and distractibility.
Myth 5

- Pain can be accurately assessed by observation and distractibility.
- Pain is a subjective experience that cannot be accurately assessed by observation.
- Distractibility is part of most pain conditions.
- We encourage our patients to act normal during headaches.
Treatment of Headache in Adolescents and Children
Lifestyle Changes

- Regular sleep schedules
- Eat every four hours
- Avoid daily caffeine
- Increase water intake
- Identify triggers
- Avoid frequent use of abortive medications
Abortive Therapy
Abortive Therapy

- Treat as early as possible
- Keep medications at school
- Ensure proper dose of medication is given
- Limit to eight days a month
- Avoid narcotics
- Combination approach sometimes needed
Home Abortive Therapies

- Ibuprofen 10mg/kg per dose
- Acetaminophen 10-15mg/kg per dose
- Naproxen sodium 5-7mg/kg per dose

Consider the addition of:
- Caffeine
- Diphenhydramine
- Anti-emetic
Pharmacological Prophylactic Therapies
Pharmacological Prophylactic Therapies

Start if non-pharmacological approaches are ineffective or not feasible

Indications:
- 4 or more headaches a month
- Abortive medicines ineffective
Options for headache prevention

- Natural supplements: magnesium, riboflavin, petadolex, feverfew
- Anti-epileptics
- Anti-hypertensives
- Anti-depressants
- Muscle relaxers
Non-pharmacological approaches for headache prevention

- **Relaxation Techniques**
  - Progressive muscle relaxation, autogenic training, and self-hypnosis

- **Biofeedback**

- **Cognitive-Behavioral therapy**
No “homebound”

Never complete homebound for headaches as it will likely intensify headaches.

Aggressive school accommodations may be necessary to keep child in school.

– Frequent breaks
– Liberal access to water and snacks
– Partial days of school
– Limit high stimulation environments
– Address learning difficulties and stressors
Thank you