

Title: Migraine Headaches in Children and Adolescents

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Abstract: Migraine affects four to ten percent of school-aged children, and nearly twice as many adolescents. The symptoms of migraine are distinctive, and it is important for parents to be familiar with these symptoms. Children and adolescents with migraine may be treated successfully with over-the-counter pain medications. However, there is strong evidence that sumatriptan nasal spray is another safe and effective migraine medication for children over age 8.

Migraine Headaches in Children & Adolescents

Migraine is the most common type of severe, recurring headache. Although migraines are often considered an adult disorder, they can occur at any age. In fact, migraines affect four to ten percent of school-aged children and twice as many adolescents. Migraine tends to run in families. Seventy-five percent of those affected have a family history of the condition.

Typical Migraine Features:

- ★ Severe, throbbing headache
- ★ Nausea or vomiting
- ★ Abdominal pain
- ★ Sensitivity to light, sound, and/or smells
- ★ Relief after sleep

The pain may be localized to one side of the head or can affect the entire head.

In young children, the headache often starts in late afternoon and usually lasts 1-2 hours. In adolescents, the headache may last much longer.

Physical activity and head motion may worsen the pain. People with migraine typically want to lie down in a dark, quiet room.

The Aura:

An aura is another recognized feature of migraine. This is a visual or sensory change that begins about an hour before the headache. An aura may include:

- ★ Flashes of light
- ★ Blurred areas of vision
- ★ Zigzag lines or stars
- ★ Numbness and tingling in face, arms, or feet
- ★ Difficulty with speech

The aura usually lasts 15 to 60 minutes and then slowly fades as the headache starts. Most children and adolescents with migraine will not have an aura.

Triggers:

Migraines can be triggered by many factors. Triggers vary for different people, and a trigger may not always lead to a headache.

Common triggers include:

Dietary:

Going too long without eating

Certain foods, including nitrates (in hot dogs, processed food), artificial sweeteners, monosodium glutamate (common flavor enhancer), caffeine, chocolate, and citrus fruits

Environmental:

Change in weather or altitude, exposure to bright lights, strong odors, or loud noise

Physical:

Change in sleep pattern (too much or too little sleep)

Intense physical exertion, fatigue

Hormonal:

In adolescent girls, migraines may occur before or during menstruation

Stress:

Increase in stress or release from stress

Diagnosis:

A doctor will ask questions about your child's symptoms, medical history, and perform a physical examination. Usually migraine is diagnosed without any further testing. But sometimes blood tests or brain imaging studies (CT scan or MRI) are needed to make the right diagnosis.

Treatment:

Avoid migraine triggers

Common triggers are listed above. It may be useful to keep a headache diary to help identify possible triggers. A headache diary lists when the headache started, how long it lasted, amount of pain, symptoms, and what relieved the headache. Include possible triggers, amount of sleep, and stress levels.

Treat acute migraine attacks

It is important to treat the migraine as soon as it begins. There are many ways to reduce the pain and symptoms of migraine:

Medication –

Most migraines in children can be treated with over-the-counter medications, such as **acetaminophen (Tylenol) or ibuprofen**. It is important to take these pain relievers only when needed. Overuse may lead to rebound headaches.

If over-the-counter medications do not relieve your child's migraine pain, your doctor may recommend stronger medications.

-Midrin: Combination pain reliever containing acetaminophen (Tylenol), approved for adolescents and children over age 8

-Triptans: Medications that regulate pain messages in the brain and constrict swollen blood vessels in the scalp. These are the most effective medications for acute migraine pain. Triptans are not yet approved by the FDA for use in children, but many studies have found them safe and effective in children over age 8. There is a nasal spray form that is useful for children who are vomiting.

-Anti-nausea medications: Relieve nausea and vomiting associated with migraines.

Other techniques to relieve acute migraine pain include: rest or sleep, ice pack on head, and massage.

Prevent migraine attacks

Preventative medication is considered if headaches occur more than 4 times per month and are not easily treated. Ask your doctor about the best preventative migraine medications for children. Relaxation training and behavioral therapy are also excellent options for children and adolescents.

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