

Headaches and migraines in children explained



Why children get headaches

Headache is a symptom, not a diagnosis. In children, it may arise from primary headache disorders, where the headache condition itself is the main problem, or from secondary causes, where pain is a signal of another illness or injury. Primary headaches include migraine and tension-type headache. Secondary headaches may occur with viral infections, sinus or ear disease, dental problems, head trauma, medication effects, dehydration, sleep deprivation, hypertension, or, rarely, intracranial pathology.

Pediatric headache assessment is different from adult assessment because children may struggle to describe pain quality, timing, or associated symptoms. A young child might say their forehead hurts, become quiet, vomit, ask for the lights to be turned off, or stop playing rather than explain throbbing pain or photophobia. Adolescents may give a more adult-like history but can still underreport triggers such as skipped meals, caffeine use, poor sleep, stress, or medication overuse.

It is also helpful to consider context. A child who develops headache with fever and body aches during a viral illness is different from a child who wakes from sleep repeatedly with severe vomiting and neurological symptoms. The

pattern over days to months matters: sudden onset, progressive worsening, recurrent stereotyped attacks, or daily persistent pain can point clinicians in different directions.

Migraine in children: how it can look

Migraine is among the most common headache diagnoses in children and adolescents. It is a neurobiological disorder involving altered pain processing and sensory sensitivity, not simply a bad headache. Genetics often contribute, so a family history of migraine can be clinically relevant, although its absence does not exclude migraine.

In adults, migraine pain is often one-sided, throbbing, moderate to severe, and worsened by activity. In children, migraine may be shorter, may affect both sides of the head, and may present more with abdominal discomfort, nausea, vomiting, pallor, dizziness, sensitivity to light or sound, and a strong need to lie down. Some children have aura: transient neurological symptoms such as visual zigzags, shimmering spots, tingling, or speech disturbance before or during the headache. Aura should be discussed with a clinician, especially if it is new, prolonged, unusual, or one-sided weakness occurs.

Clues that support migraine include recurrent similar attacks, relief after sleep, inability to continue normal activities, nausea or vomiting, photophobia, phonophobia, and a family history. Younger children may not say they are light-sensitive; instead, they may hide under a blanket or avoid screens. Many families notice patterns: headaches after missed meals, dehydration, overexertion, bright light, travel, menstrual cycles, or disrupted sleep.

Migraine can affect school attendance, sport participation, mood, and family routines. Validating the pain is important. A child with migraine is not being dramatic; the nervous system is temporarily in a sensitized state, and compassionate support helps reduce fear and disability.

Other common headache patterns

Tension-type headache is another frequent primary headache pattern. It often feels like pressure or tightness rather than throbbing and is usually mild to

moderate. It may be associated with stress, prolonged screen use, jaw tension, neck strain, inadequate sleep, or long periods without food or fluids. Unlike migraine, tension-type headache typically causes less nausea and less sensitivity to light or sound, and children may be able to continue activities.

Headache during an acute infection is also common. Fever, congestion, sore throat, cough, muscle aches, or fatigue can accompany viral illness. In these situations, the headache often improves as the underlying illness resolves, although persistent high fever, neck stiffness, confusion, worsening lethargy, or a non-blanching rash requires urgent assessment.

Sinus disease is often suspected, but true bacterial sinusitis has a specific clinical picture, such as persistent nasal symptoms, facial pressure, fever, or worsening after initial improvement. Many headaches attributed to sinuses are actually migraine, because migraine can cause facial pressure, nasal symptoms, and tearing.

Medication-overuse headache in children can occur when pain-relieving medicines are used too frequently. This is not a moral failing; families often give medication because the child is suffering. However, frequent analgesic use can sometimes reinforce a cycle of recurring headache. Any child needing pain relief often should be reviewed by a healthcare professional to create a safer plan.

How clinicians evaluate a child with headaches

A clinician begins with a detailed history. Useful questions include when the headaches started, how often they occur, how long they last, where the pain is, whether the child vomits, whether light or sound bothers them, whether exertion worsens pain, and whether the headaches interrupt sleep, school, or play. The clinician will also ask about fever, trauma, medications, caffeine, sleep, hydration, meals, stress, vision, menstrual history when relevant, and family history of migraine.

The physical examination usually includes vital signs, growth parameters, general examination, and a focused neurological examination. Clinicians look for mental status changes, abnormal eye movements, weakness, coordination problems, gait changes, papilledema on eye examination when assessable, and

signs of systemic illness. Blood pressure measurement matters because hypertension can be associated with headache.

Most children with a stable, recurrent headache pattern and a normal neurological examination do not need neuroimaging. Imaging is considered when the history or examination suggests a possible secondary cause. This is one reason a careful clinical evaluation is so valuable: it helps avoid unnecessary tests while identifying children who need urgent investigation.

A headache diary for children can be very helpful. Families can record date, start time, duration, pain severity, location, associated symptoms, possible triggers, medicines used, response, sleep, meals, fluids, school stress, and menstrual timing if relevant. Over time, the diary can reveal patterns that are hard to remember during appointments and can help the clinician assess treatment response.

Headache warning signs in children

Families do not need to panic about every headache, but they do need to know when prompt medical care is warranted. Headache warning signs in children are features that increase concern for infection, bleeding, raised intracranial pressure, neurological disease, significant injury, or another secondary cause.

Seek urgent medical advice if a child has a sudden, explosive headache; headache after significant head injury; headache with confusion, fainting, seizure, neck stiffness, persistent high fever, new weakness, difficulty walking, persistent vomiting, abnormal speech, or vision loss; or a headache that is rapidly worsening over days or weeks. Headache that wakes a child repeatedly from sleep, is worse on waking with vomiting, or is triggered by coughing, straining, or position change should also be assessed.

Age matters. Recurrent headache in a very young child, especially under age 5, deserves medical evaluation because history is less reliable and some secondary causes are harder to detect. Children with cancer, immune compromise, blood clotting disorders, shunts, significant congenital conditions, or recent serious infection may need a lower threshold for urgent assessment.

Caregivers should trust their sense that a child is "not right." A child who is

unusually drowsy, inconsolable, progressively worsening, or behaving very differently needs prompt evaluation even if the headache description is vague.

Supportive care and prevention strategies

For a child with a known, previously assessed headache pattern and no red flags, supportive care may help. Rest in a dark quiet room for headache, sleep if possible, fluids, and a calm environment can reduce sensory load. Hydration and childhood headaches are closely linked for many families, especially around sport, hot weather, illness, or long school days. Regular meals and avoiding long fasting periods can also reduce susceptibility.

Medication decisions should be guided by a clinician, particularly for recurrent headaches, younger children, children with chronic medical conditions, or children already taking other medicines. Over-the-counter pain relievers may be appropriate for some children, but dosing must be weight-based and age-appropriate, and frequency matters. Avoid giving aspirin to children unless specifically directed by a clinician because of the risk of Reye syndrome in certain viral contexts.

Prevention is often built on routines: consistent sleep and wake times, breakfast, regular fluids, balanced physical activity, limited caffeine, screen breaks, and stress support. For some children, relaxation training, cognitive behavioral strategies, biofeedback, or school accommodations can reduce disability. A plan may include what the child should do at school when a migraine begins, when caregivers should be called, and when urgent care is needed.

If headaches are frequent, disabling, associated with neurological symptoms, or not improving with first-line measures, the child's clinician may recommend further evaluation or a pediatric neurologist for headaches. Preventive medicines and acute migraine-specific treatments exist, but they require individualized medical decision-making based on age, diagnosis, comorbidities, contraindications, and family preferences.

Helping your child feel safe and heard

Children often worry that headaches mean something frightening is happening in

their brain. Honest, calm reassurance can help: many headaches are treatable, doctors have structured ways to check for concerning causes, and the child will not be expected to "push through" severe pain. Avoid blaming language about stress, screens, or diet; these may be contributors, but the pain is real.

School can become complicated when headaches recur. Some children fear missing work; others may be misperceived as avoiding class. A written plan from the healthcare professional can clarify allowed rest, hydration, snacks, medication administration if prescribed, screen adjustments, and when to contact caregivers. Teachers and school nurses can be important allies.

Emotional health also matters. Anxiety, depression, bullying, academic pressure, family stress, and sleep disturbance can amplify pain pathways and make headaches more disabling. This does not mean the headache is "psychological." It means the brain, body, and environment interact. A supportive approach addresses both pain biology and the child's daily life.

The goal is not only fewer headaches, but a child who feels believed, prepared, and able to participate in normal childhood as much as possible. If headaches are disrupting life, asking for medical help is appropriate and compassionate.