

# **Migraines**

Pediatric migraines are a common neurological condition that affects children and adolescents. They are characterized by a severe headache that is often accompanied by other symptoms, such as nausea, vomiting, and sensitivity to light and sound.

### **Definition:**

Pediatric migraines are a type of headache disorder that affects children and adolescents. They are typically characterized by moderate to severe pain that is often throbbing or pulsating in nature. Other symptoms may include nausea, vomiting, sensitivity to light and sound, and visual disturbances. Pediatric migraines can be classified into two categories: migraine with aura and migraine without aura.

Migraine with aura is characterized by visual disturbances, such as flashing lights or zigzag lines, that occur before the headache begins. Migraine without aura does not have these visual disturbances. However, both types of migraines can be debilitating and interfere with a child's ability to function normally.

### **Physiology:**

The exact cause of pediatric migraines is not fully understood. However, researchers believe that genetics and environmental factors may play a role in the development of this condition. It is thought that changes in the brainstem and its interactions with the trigeminal nerve may lead to the onset of migraines.

During a migraine, the trigeminal nerve releases neuropeptides that cause inflammation and swelling of the blood vessels in the brain. This, in turn, leads to the pain and other symptoms associated with migraines.

## **Triggers:**

Pediatric migraines can be triggered by a variety of factors, including:

- 1 Stress: Stress is a common trigger for migraines in both children and adults.
- 2 Hormonal changes: Hormonal changes, such as those that occur during puberty or the menstrual cycle, can trigger migraines.
- 3 Lack of sleep: Lack of sleep or irregular sleep patterns can trigger migraines in some children.
- 4 Food triggers: Certain foods, such as chocolate, caffeine, and MSG, have been linked to migraines in some children.
- 5 Weather changes: Changes in barometric pressure, temperature, and humidity can trigger migraines in some children.
- 6 Sensory stimuli: Bright lights, loud noises, and strong odors can trigger migraines in some children.
- 7 Physical activity: Intense physical activity, such as sports or exercise, can trigger migraines in some children.



## Symptoms:

- 1 Sensitivity to light
- 2 Sensitivity to sound
- 3 Nausea and emesis 80% of the time
- 4 Throbbing or sharp pain, often on one side of the head
- 5 Desire to rest in a dark, quiet area during migraine

## Treatment:

The treatment of pediatric migraines typically involves a combination of lifestyle changes and medication. Lifestyle changes may include avoiding triggers, getting regular exercise, and establishing a regular sleep schedule. Medications may include abortive medicines to stop a migraine such as ibuprofen, acetaminophen, or triptans such as Imitrex or Maxalt. For chronic migraine sufferers, preventative medicines taken daily such as beta blockers (propranolol), calcium channel blockers (verapamil) or cyproheptadine (type of antihistamine) may be employed to help prevent migraines from occurring.

In addition to these treatments, some children may benefit from complementary therapies, such as acupuncture or relaxation techniques. It is important for parents and caregivers to work with their child's healthcare provider to develop an individualized treatment plan that takes into account their specific needs and symptoms.