



Patient Education

# Migraine Headache

by: *NeuroCare.AI*

## Overview

**Migraine** is quite common, **affecting 12% of the population** and afflicting up to 17% of women and 6% of men each year. It is the **second leading cause of disability** around the globe. Migraine is **a condition that runs in families**. Its prevalence rises throughout puberty and continues to rise until 35 to 39 years of age, after which it begins to decline, especially after menopause. It is more common than diabetes, epilepsy, and asthma combined. Moderate, consistent exercise can help to lessen the frequency of episodes.

**Migraines are recurrent headaches** caused by changes in the brain and surrounding vascular system. In most cases, it is accompanied by an aura (changes in vision and sense of smell). The severity of migraine headaches can range from mild to severe, with throbbing and unpleasant symptoms.

It is also important to note that migraine headaches are **throbbing and unpleasant**. They can be made worse by movement, light, sounds, or scents, and they can cause nausea, vomiting, visual impairments, and sensitivity to sound and light. They can last anywhere from 4 to 72 hours and cause major disruption in your life.



### Key Insights:

- There is about **three times** as many women suffering from migraines as men.
- About **10% of school-age children** suffer from migraines.
- There is a **50% increased risk of getting migraines** as a child when one or both of your parents have a history of migraines.
- If a person suffers from **at least 15 migraines a month**, they are deemed to be chronic sufferers of migraines.
- It is estimated that there are **39 million Americans with migraines**.

# What are the Symptoms of a Migraine?

In a recent survey conducted by **The Migraine Trust Organization**, out of 1,800 respondents below are the listed top ten common migraines symptoms arranged in order:

## 10 Most Common Migraine Symptoms

1. Fatigue
2. Severe Head Pain
3. Light Sensitivity
4. Difficulty Concentrating
5. Nausea or vomiting
6. Stiff Neck/ Back and Neck Muscles
7. Feeling Down
8. Sound Sensitivity
9. Background Headache
10. Visual Aura (Flashing Lights)

## Other unexpected migraine symptoms

1. Having constipation
2. Accompanied by diarrhea
3. Difficulty Concentrating
4. An increase in thirst
5. Increased food cravings
6. Swelling of the face
7. Goosebumps
8. Change in the pressure of the blood

# What Causes Migraines?

The **blood arteries in your head** tighten and enlarge during a migraine, causing pain. A migraine can be triggered by **physical or mental stress**, as well as particular meals. Migraines can be brought on by a number of things. Food and drink triggers, sleep habits, hormones, and tightness, particularly in the neck, are all examples of stress (and how stress is handled). However, the specific cause is unknown.



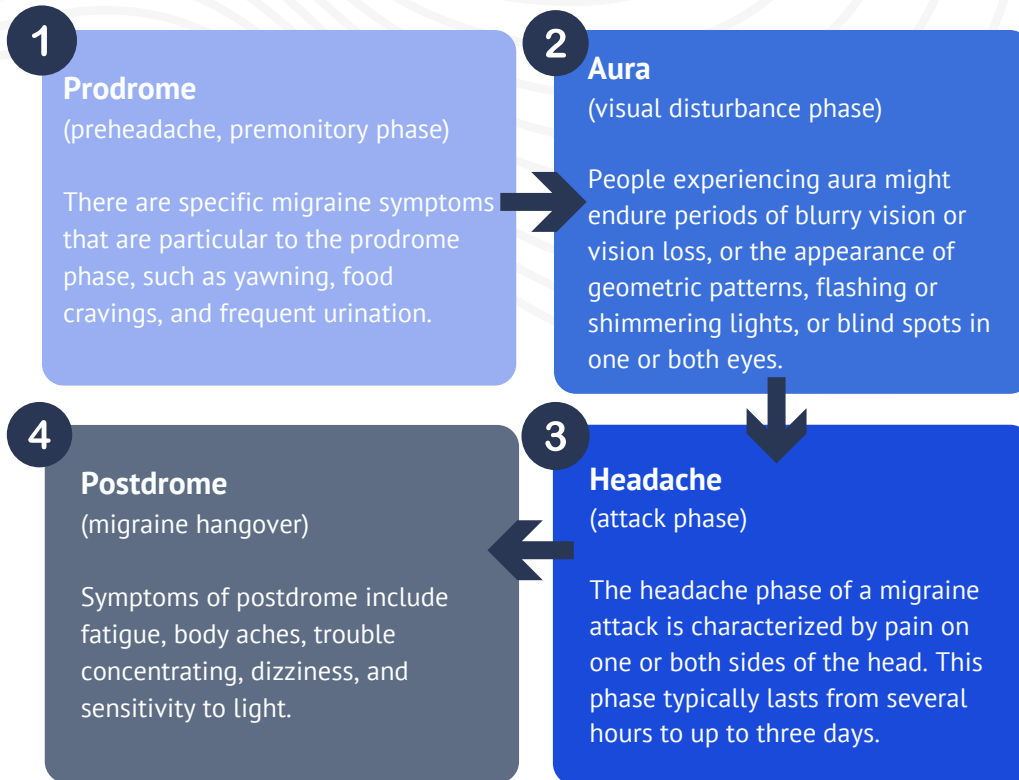
# Phases of a Migraine Attack

Knowing the phases of a migraine attack can help people manage their disease. Early migraine symptoms like fatigue and blurred vision can serve as warning signs that you need abortive medicine. Some people can even avoid migraines by identifying and treating them early. In addition, identifying risk factors that can cause postdrome "hangovers" may help people anticipate how long it is going to last.



# Phases of a Migraine Attack

Continuation...



## Triggers of Migraine

Migraine headaches are caused by being withdrawn or exposed to a variety of situations. According to a retrospective research, 76% of patients reported triggers. Some of them are likely contributing variables, while others are simply possible or unproven.



Insufficient or excessive sleep



Odors (perfumes, colognes, petroleum distillates)



Smoking and Drinking alcohol



Food (aspartame as a possible factor, and tyramine and chocolate as unproven factors)



Menstruation, ovulation, and pregnancy hormone changes



Changes in weather



Stress



Meals skipped



Neck pain



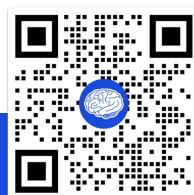
Sound



Exercise



Heat and Light exposition



# Types of Migraine

## Common Types of Migraines



- **Migraine without aura.** A recurrent headache episode that lasts 4 to 72 hours and is usually unilateral in nature, pulsing in quality, moderate to severe in severity, increased by physical activity, and accompanied by nausea and light and sound sensitivity.



- **Migraine with aura.** It is characterized by recurring, fully reversible attacks that last minutes and include one or more of the following unilateral symptoms: visual, sensory, speech and language, motor, brainstem, and retinal symptoms, which are commonly followed by headache and migraine symptoms.

## Uncommon Types of



- **Hemiplegic migraine.** A rare type of migraine that is accompanied by temporary weakness on one side of the body. There is a similarity between these symptoms and those of a stroke. Paralysis, speech disturbances, and weakness on one side of the body are some of the symptoms associated with this condition.



- **Ophthalmic migraines.** Present with visual disturbances, blind spots, and blindness in one eye, which last about a minute before the migraine begins.



- **Ophthalmoplegic migraines.** Common among young children and adolescents. It is characterized by severe pain behind the eye, double vision, drooping of the eyelids, vomiting, and seizures.



- **Vestibular migraine.** Characterized by vertigo (a feeling of movement), dizziness, or problems with balance. During the attack, they may feel that the entire room is spinning, and they may feel like they are moving even when they are not.



- **Basilar migraine.** It occurs in the basilar region of the brain. Most often, it affects adolescents and young women. Most likely, it is the result of hormonal changes in the body. It is characterized by dizziness or vertigo as well as slurred speech and loss of consciousness.



- **Abdominal migraine.** It affects four out of 100 people both as children and as adults. This condition tends to affect younger children most frequently. Aside from nausea and vomiting, a child may also experience dizziness and lightheadedness. These symptoms may last for up to three days.



# Treatment

Your doctor may prescribe medication to help you cope with the pain and advise you to make certain lifestyle modifications. He may also recommend drugs to help you avoid migraines.

## Pharmacological Treatment

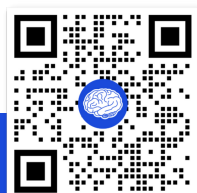
1. **Acute (Abortive) treatment** aims to stop a headache from getting worse. It must be treated as soon as possible and with a large single dose. In patients with migraine-induced gastric stasis, oral medications may be ineffective. As a result, parenteral medicine may be the only option for some individuals, particularly those suffering from nausea or vomiting.
2. **Prophylactic treatment** aims to minimize attack frequency, enhance reactivity to the severity and length of acute attacks, and reduce impairment. Before a long-term Prophylactic treatment is generally initiated, we need to ensure that Individual migraine triggers were identified and the utmost measures are taken to avoid those triggers.



Take your prescription migraine treatment as soon as the pain begins, rather than waiting for it to get worse. Then lie down in a dark, quiet room and cover your eyes with a cold cloth.

## Non-Pharmacological Treatment

1. Transcutaneous supraorbital nerve stimulation can reduce intensity.
2. Transcranial magnetic stimulation is an effective second-line treatment with minimal side effects. Additionally, it can be used to treat chronic migraine headaches. For people with epilepsy, this is not fully recommended.
3. Non-painful remote electric neurostimulation could be considered a first-line treatment.
4. Peripheral nerve blocking
5. Cognitive-behavioral therapy
6. Biofeedback



# Prevention

To help prevent migraines, consider the following lifestyle changes:



**Alter your eating habits** - don't skip meals, but stay away from foods that are high in fat and sugar. **Keep a "headache journal"** to help identify foods that can cause migraines.



Establish **appropriate sleeping habits**. Even on weekends, stick to a regular sleeping and waking routine.



**Take your medicine exactly as directed**. If you're in pain, try aspirin or acetaminophen (Tylenol). If you require greater pain medicine, your doctor will prescribe it. Take it precisely as directed because some drugs can make migraines worse if taken too often.



**Lower your stress levels**. Use relaxation techniques like yoga, meditation and progressive muscle relaxation. Chiropractic treatment can also assist to address some contributing factors or side effects. Your healthcare professional can give you additional information about these stress relievers.

## Which Lifestyle Do You Need to Consider?

Despite significant advances in understanding the pathophysiology and treatment of migraine, lifestyle modifications have become increasingly important.



### Physical Activity

Maintaining a physically active body, improved management of obesity, a healthy diet, and a better lifestyle, such as adequate sleep and avoiding drug abuse and alcohol, have been shown to significantly reduce attacks. For migraine sufferers, these factors need to be evaluated in their overall management strategies.



### Alcohol Intake

Alcohol triggers migraine attacks in about 75% of patients. Migraine attacks can be triggered by smoking or nicotine use in migraine onset. Among former smokers, smoking cessation is recommended. The pathogenesis of smoking or using nicotine in migraines is controversial and affects the central nervous system.



### Hydration

Headache is associated with fluid restriction and dehydration. Increased hydration status results in more balanced plasma osmolality and ion concentrations, which can help with migraine.



## How can we help?

In order to help people with migraine thrive at work, the following 10 reasonable adjustments are most commonly used to assist them:

- Offer them **flexible working hours and breaks**.
- Give them **enough time to attend to their medical appointments**.
- Make changes for them and adjust the overhead lighting.
- Use technology that is **migraine-friendly** such as an anti-glare screen.
- Offer **flexible work-from-home policies** specifics for migraine victims.
- Modify their workstation so they can work efficiently (desk height, the inclination of chairs, etc).
- Give them **100% access to drinking water**.
- Ensure quietness in the entire workplace.



## Consult your Doctor

Remember that to avoid migraines, it is important to **practice good self-care and avoid triggers at the same time**. Once a migraine has started, it is of utmost importance to begin early treatment with migraine-specific medication as soon as possible.

You should immediately **call 911** or **go to the nearest emergency department** if your migraine symptoms become more severe than normal.

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