

## What is a Migraine?

If you suffer from migraine headaches, you're not alone. About 12 percent of the U.S. population gets them. Migraines are recurring attacks of moderate to severe pain. The pain is throbbing or pulsing, and is often on one side of the head. During migraines, people are very sensitive to light and sound. They may also become nauseated and vomit.

Migraine is three times more common in women than in men. Some people can tell when they are about to have a migraine because they see flashing lights or zigzag lines or they temporarily lose their vision.

Many things can trigger a migraine. These include

- Anxiety
- Stress
- Lack of food or sleep
- Exposure to light
- Hormonal changes (in women)

Doctors used to believe migraines were linked to the opening and narrowing of blood vessels in the head. Now they believe the cause is related to genes that control the activity of some brain cells. Medicines can help prevent migraine attacks or help relieve symptoms of attacks when they happen. For many people, treatments to relieve stress can also help.

## Causes

Migraine headaches tend to first appear between the ages of 10 and 45. Sometimes they may begin later in life.

- Migraines occur more often in women than men
- Migraines may run in families
- Some women, but not all, may have fewer migraines when they are pregnant

A migraine is caused by abnormal brain activity, which can be triggered by a number of factors. However, the exact chain of events remains unclear. Today, most medical experts believe the attack begins in the brain, and involves nerve pathways and chemicals. The changes affect blood flow in the brain and surrounding tissues.

Alcohol, stress and anxiety, certain odors or perfumes, loud noises or bright lights, and smoking may trigger a migraine. Migraine attacks may also be triggered by:

- Caffeine withdrawal
- Changes in hormone levels during a woman's menstrual cycle or with the use of birth control pills
- Changes in sleep patterns

- Exercise or other physical stress
- Missed meals
- Smoking or exposure to smoke

Migraine headaches can be triggered by certain foods. The most common are:

- Any processed, fermented, pickled, or marinated foods, as well as foods that contain monosodium glutamate (MSG)
- Baked goods, chocolate, nuts, peanut butter, and dairy products
- Foods containing tyramine, which includes red wine, aged cheese, smoked fish, chicken livers, figs, and certain beans
- Fruits (avocado, banana, citrus fruit)
- Meats containing nitrates (bacon, hot dogs, salami, cured meats)
- Onions

This list may not include all triggers.

True migraine headaches are not a result of a brain tumor or other serious medical problem. However, only an experienced health care provider can determine whether your symptoms are due to a migraine or another condition.

### Symptoms

Vision disturbances, or aura, are considered a "warning sign" that a migraine is coming. The aura occurs in both eyes and may involve any or all of the following:

- A temporary blind spot
- Blurred vision
- Eye pain
- Seeing stars or zigzag lines
- Tunnel vision

Other warning signs include yawning, difficulty concentrating, nausea, and trouble finding the right words.

Not every person with migraines has an aura. Those who do usually develop one about 10 - 15 minutes before the headache. However, an aura may occur just a few minutes to 24 hours beforehand. A headache may not always follow an aura.

Migraine headaches can be dull or severe. The pain may be felt behind the eye or in the back of the head and neck. For many patients, the headaches start on the same side each time. The headaches usually:

- Feel throbbing, pounding, or pulsating
- Are worse on one side of the head
- Start as a dull ache and get worse within minutes to hours
- Last 6 - 48 hours

Other symptoms that may occur with the headache include:

- Chills
- Increased urination
- Fatigue
- Loss of appetite
- Nausea and vomiting
- Numbness, tingling, or weakness
- Problems concentrating, trouble finding words
- Sensitivity to light or sound
- Sweating

Symptoms may linger even after the migraine has gone away. Patients with migraine sometimes call this a migraine "hangover." Symptoms can include:

- Feeling mentally dull, like your thinking is not clear or sharp
- Increased need for sleep
- Neck pain

### Exams and Tests

Your doctor can diagnose this type of headache by asking questions about your symptoms and family history of migraines. A complete physical exam will be done to determine if your headaches are due to muscle tension, sinus problems, or a serious brain disorder.

There is no specific test to prove that your headache is actually a migraine. However, your doctor may order a brain MRI or CT scan if you have never had one before or if you have unusual symptoms with your migraine, including weakness, memory problems, or loss of alertness.

An EEG may be needed to rule out seizures. A lumbar puncture (spinal tap) might be done.

## Treatment

There is no specific cure for migraine headaches. The goal is to treat your migraine symptoms right away, and to prevent symptoms by avoiding or changing your triggers.

A key step involves learning how to manage your migraines at home. A headache diary can help you identify your headache triggers. Then you and your doctor can plan how to avoid these triggers.

If you have frequent migraines, your doctor may prescribe medicine to reduce the number of attacks. You need to take the medicine every day for it to be effective. Medications may include:

- Antidepressants such as amitriptyline or venlafaxine
- Blood pressure medicines such as beta blockers (propranolol, metoprolol) or calcium channel blockers (verapamil)
- Seizure medicines such as valproic acid, gabapentin, and topiramate

Botulinum toxin type A (Botox) injections may also help reduce migraine attacks if they occur more than 15 days per month.

### TREATING AN ATTACK

Other medicines are taken at the first sign of a migraine attack. Over-the-counter pain medications such as acetaminophen, ibuprofen, or aspirin are often helpful when your migraine is mild. Be aware, however, that:

- Taking medicines more than 3 days a week may lead to rebound headaches -- headaches that keep coming back.
- Taking too much acetaminophen can damage your liver. Too much ibuprofen or aspirin can irritate your stomach.

If these treatments don't help, ask your doctor about prescription medicines. These include nasal sprays, suppositories, or injections. Your doctor can select from several different types of medications, including:

- Triptans -- prescribed most often for stopping migraine attacks
- Ergots -- contain different forms of ergotamine
- Isometheptene (Midrin)

Some migraine medicines narrow your blood vessels. If you are at risk for heart attacks or have heart disease, talk with your health care provider before using these medicines. Do not take ergots if you are pregnant or planning to become pregnant.

Other medications are given to treat the symptoms of migraine. They may be used alone or along with other drugs. Medications in this group include:

- Nausea medicines
- Sedatives such as butalbital

- Narcotic pain relievers

Feverfew is a popular herb for migraines. Several studies, but not all, support using feverfew for treating migraines. If you are interested in trying feverfew, make sure your doctor approves. Also, know that herbal remedies sold in drugstores and health food stores are not regulated. Work with a trained herbalist when selecting herbs.

#### Support Groups

- American Council for Headache Education - [www.achenet.org](http://www.achenet.org)
- The National Migraine Association - [www.migraines.org](http://www.migraines.org)
- National Headache Foundation - [www.headaches.org](http://www.headaches.org)

#### Outlook (Prognosis)

Every person responds differently to treatment. Some people have rare headaches that need little to no treatment. Others need to take several medications or even go to the hospital sometimes.

Migraine headache is a risk factor for stroke in both men and women. The risk is higher in people who have migraines that occur with aura. People with migraines should avoid other risk factors for stroke, include smoking, taking birth control pills, and eating an unhealthy diet.

Call 911 if:

- You are experiencing "the worst headache of your life"
- You have speech, vision, or movement problems or loss of balance, especially if you have not had these symptoms with a migraine before
- Your headaches are more severe when lying down
- The headache starts very suddenly

Also, call your doctor if:

- Your headache patterns or pain change
- Treatments that once worked are no longer helpful
- You have side effects from medication, including irregular heartbeat, pale or blue skin, extreme sleepiness, persistent cough, depression, fatigue, nausea, vomiting, diarrhea, constipation, stomach pain, cramps, dry mouth, or extreme thirst
- You are pregnant or could become pregnant -- some medications should not be taken during pregnancy