



A migraine is a very bad headache that tends to recur. With a migraine, you may feel nauseated and might vomit. The pain is usually on one side of your head and you may be very sensitive to bright lights and noises. Moving around can make the headache feel worse. There are many forms of migraine headaches. Classic and common are the two major varieties.

### SYMPTOMS OF A MIGRAINE

The basic difference between the two types of migraine is the appearance of an “aura.” The aura is the occurrence of neurological symptoms 10-30 minutes before the **classic** migraine attack. You may see flashing lights, zigzag lines or may temporarily lose vision. Other symptoms of classic migraine include speech difficulty, confusion, weakness of an arm or leg and tingling of face or hands.

The pain of a classic migraine headache is described as an intense throbbing or pounding felt in the forehead/temple, ear/jaw or around the eyes. Classic migraine starts on one side of the head, but may eventually spread to the other side. An attack may last one to two pain-racked days.

The **common** migraine - a term that reflects the disorder’s more frequent occurrence in the general population - is not preceded by an aura. Some people do experience a variety of vague symptoms before common migraines - mental fuzziness, mood changes, fatigue, and unusual retention of fluid. During the headache phase of a common migraine, you may have abdominal pain and diarrhea, increased urination, nausea and vomiting. Both classic and common migraines can strike as often as several times a week or rarely as once every few years.

### WHAT CAUSES MIGRAINE

Doctors think migraines may be caused by a chemical or electrical problem in certain parts of the brain. A key element of a migraine headache is blood flow change in the brain. According to theory, the nervous system responds to a trigger such as stress by creating spasms in the nerve-rich arteries at the base of the brain. The spasms constrict several arteries supplying blood to the brain, including arteries from the scalp and neck. As these arteries constrict, the flow of blood to the brain is reduced. At the same time, platelets clump together and release a chemical called serotonin. Serotonin acts as a powerful constrictor of arteries further reducing blood and oxygen supply to the brain. In reaction to the reduced oxygen supply, certain arteries within the brain dilate to meet the brain’s energy needs. Doctors believe this dilation causes the pain of migraine. “Migraine headaches tend to run in families, suggesting that genetic factors contribute to a person’s susceptibility to migraines.” (UpToDate, 2006).

Some things can trigger a migraine or make it worse. Headache triggers can be things you eat, smell, hear or see.

- Stress and time pressure, major hassles, major losses, anger and conflict.
- Smells and fumes, tobacco smoke, light glare or dazzle, weather changes.
- Monthly periods, birth control pills, estrogen therapy.
- Too much, too little or interrupted sleep.
- Hunger, fasting, specific foods or beverages. (See table 1.)
- Excessive activity.
- Certain medicines may cause migraine. Talk to your provider before you stop taking a medication. (See table 2.)

**Table 1****Foods that Might Trigger a Migraine**

• Aged Cheese	• Bananas, figs and raisins
• Beer, wine and hard liquor	• Caffeine in coffee, tea and cola, and some over-the-counter medicines, as well as caffeine withdrawal (if you try to give up caffeinated sodas, for example); chocolate
• Dairy products such as ice cream, milk, yogurt, cheese, whipped cream and sour cream	• Fermented and pickled foods such as pickled herring
• Monosodium glutamate (MSG), which is found in Chinese food, Accent seasoning, Lawry's Seasoned Salt, canned soups, TV dinners, processed meats, and some processed nuts and snack chips	• Most citrus fruits like oranges, grapefruit and lemons
• Nuts and peanuts	• Onions
• Pea pods, or pods of lima beans	• Processed meats, deli sandwich meats, hotdogs and other nitrite-containing meats
• Saccharin or aspartame in diet foods or diet sodas and drinks	• Sulfites in shrimp and processed potatoes, like boxed mashed potato mix
• Yeast-containing products, such as fresh breads and donuts	

**Table 2****Medicines that Might Trigger a Migraine**

• Cimetidine (brand name: Tagamet)	• Estrogens (including birth control pills)
• Fenfluramine (brand name: Pondimin)	• Indomethacin (brand name: Indocin)
• Nifedipine (brand name: Adalat, Procardia)	• Nitroglycerin (brand name: Nitrostat)
• Pain medicines in general (either overuse or withdrawal from them)	• Reserpine-containing medicines (brand names: Ser-ap-Es, Hydropres, Regroton)
• Theophylline (brand name: TheoDur, Theo-24)	

**WOMEN AND MIGRAINES**

Both men and women are affected by migraines but the condition is most common in adult women, about three times more commonly in women than in men. Both sexes may develop migraines in infancy, but most often the disorder begins between the ages of five and 35.

Hormones seem to influence migraine development. Some women who take oral contraceptives or estrogen experience worsening headaches while others improve. Similarly, some women have an increasing headache pattern during pregnancy while others have diminished headache intensity. Other women develop migraines for the first time when they are pregnant. Headaches may increase in some women in the days before their menstrual period. Women who do not have migraines may develop migraines as a side effect to using Oral Contraceptive Pills (OCP).

**HOW IS A MIGRAINE HEADACHE TREATED**

There are many things you can do to reduce the pain of migraine. The most common methods of preventing and controlling migraines and other vascular headaches include:

- Drug therapy
- Biofeedback training
- Stress reduction
- Elimination of certain foods from the diet
- Regular exercise, such as swimming or vigorous walking
- Temporary relief can sometimes be obtained by using cold packs or by pressing on bulging arteries found in front of the ear or the painful side of the head.
- Avoiding known triggers

## DRUG THERAPY

In migraines, drug therapy can be used in two ways: to prevent the attack or to relieve symptoms after the headache occurs.

If you suffer infrequently from migraines, drugs can be taken at the first sign of a headache to stop or ease the pain. People who get occasional mild migraines may benefit from taking aspirin or acetaminophen at the start of an attack. A small amount of caffeine may be useful if taken in the early stages of a migraine.

If you suffer frequently from migraines, both pain relief and prophylactic measures may be used. For many years ergotamine was the only drug available to address severe migraine pain relief. Now there are newer, more effective drugs available - Imimtrex, Zomig, Maxalt, are some choices for relief of the pain of migraine. For headaches that occur three or more times a month, preventive treatment is often recommended. Drugs used to prevent classic and common migraines include methysergide, which counteracts blood vessels; propranolol, which stops blood vessel dilation and amitriptyline, an antidepressant.

## ORGANIZATIONS/CONTACT INFORMATION

### American Headache Society (AHS)

19 Mantua Road, Mt. Royal, NJ 08061  
Phone: (856) 423-0043  
Fax: (856) 423-0082  
www.ahsnet.org  
ahshq@talley.com

### The Excedrin Headache Resource Center

"Headache Center Resources" including a headache diary and prevention techniques  
Internet address: www.excedrin.com  
Toll Free: 1-800-580-4455

### The Migraine Relief Center

Enroll in the MigraineCare Program or take the Headache Quiz.  
Internet address: www.migrainehelp.com  
Toll Free: 1-888-825-5249

### National Headache Foundation

Info@headaches.org  
Internet address: www.headaches.org  
Phone (773) 388-6399  
Toll Free: 1-888-643-5552  
Fax: (773) 525-7357

## References

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American Family Physician. 11-15-97

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UpToDate at: www.utdol.com Retrieved July 19, 2006.

If you are a registered University of Illinois student and you have questions or concerns, or need to make an appointment, please call: **Dial-A-Nurse at 333-2700**

If you are concerned about any difference in your treatment plan and the information in this handout, you are advised to contact your health care provider.

Visit the McKinley Health Center Web site at: <http://www.mckinley.uiuc.edu>