

Cluster Headache

Cluster headache was nicknamed “suicide headache” in 1939 after Dr. B. T. Horton, an American neurologist who proposed a theory for the mechanism underlying cluster headaches, described the headache as “so severe . . . [patients] had to be constantly watched for fear of suicide.” Patients commonly describe cluster headache as the worst pain they have ever experienced. Cluster headaches are typically one-sided and tend to occur in **clusters** (groups) over a period of weeks or months. About 3 of 1000 people have cluster headaches. The December 9, 2009, issue of *JAMA* includes an article about the effectiveness of oxygen in treating cluster headaches.

SYMPTOMS

Attacks typically last from 15 minutes to 3 or more hours. Onset is rapid and can wake people from sleep. There are no warning signs, but some people have preliminary sensations of pain (“shadows”) in the general area of the attack. Associated symptoms occur on the same side of the face as the headache and can include tearing, eye redness, runny nose, facial sweating, and drooping eyelid. Patients also have a sense of restlessness. Headaches typically occur at the same time each day or night, suggesting that the **hypothalamus** (the part of the brain governing “circadian rhythm”) is involved. In **episodic** cluster headache, attacks often occur daily for several weeks, separated by a headache-free period lasting several weeks, months, or years. About 10% to 15% of individuals with cluster headaches have **chronic** cluster headaches. These patients can have multiple headaches daily for years without any remission between cycles. Cluster headache is much less common than either migraine or tension-type headaches.

DIAGNOSIS

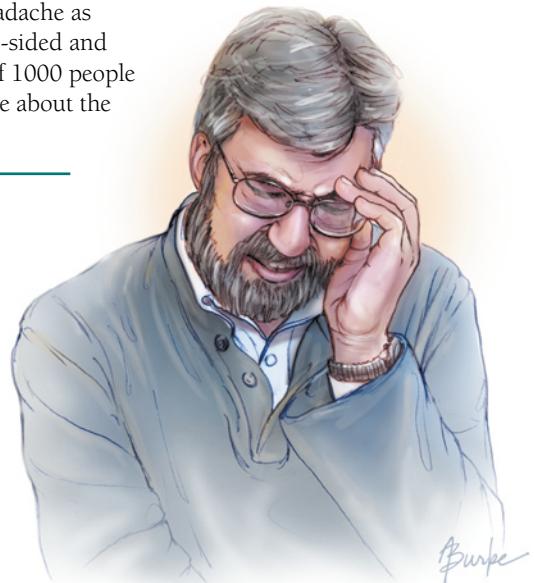
Diagnosis is based mainly on the patient's description of the headaches. Someone who is just beginning to get cluster headaches should see a doctor in order to rule out other disorders and to find the most effective treatment.

CAUSE

While the cause of cluster headache is unknown, the intense pain is thought to relate to malfunction of descending pain control centers in the hypothalamus and brainstem regions. A genetic component exists, but no causative gene has been identified. Triggers of an attack include nitroglycerin, alcohol, exposure to **hydrocarbons** (petroleum solvents, perfumes), and heat.

TREATMENT

Medical treatment of cluster headache is either preventive or abortive. Abortive treatment is used to stop a headache once it has begun. Inhalation of 100% oxygen at 12 liters per minute through a mask provides relief for most patients. Triptan medications are also used. Preventive treatment involves ongoing use of medications or treatments proven effective in delaying onset or limiting the number of headaches. These treatments are taken even when you are not experiencing headaches and include calcium channel blockers, steroids, melatonin, lithium, some antiseizure medicines, and nerve blocks.



FOR MORE INFORMATION

- National Institutes of Health
www.nlm.nih.gov/medlineplus/ency/article/000786.htm

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To find this and previous JAMA Patient Pages, go to the Patient Page link on JAMA's Web site at www.jama.com. Many are available in English and Spanish. A Patient Page on headaches was published in the May 17, 2006, issue.

Source: National Institutes of Health

Huan J. Chang, MD, MPH, Writer

Alison E. Burke, MA, Illustrator

Richard M. Glass, MD, Editor

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