

Understanding Headaches

Headaches are common, conceptually often misunderstood and pose a major burden economically to our society.

- Over 45 million Americans, more than the 33 million sufferers of asthma, diabetes and coronary heart disease combined, get chronic, recurring headaches. Of these, 28 million suffer from migraines annually.**
- It is estimated that industry loses 50 billion dollars per year due to absenteeism and medical expenses caused by headache, and migraine sufferers lose more than 157 million workdays each year.**
- In excess of 4 billion dollars are spent annually on over-the-counter pain relievers for headache. (Many of these are ineffective for the headache sufferer).**
- Seventy percent of all migraine sufferers are women.**

A properly conducted history and physical examination is essential in examining the many types of potential causes of headaches. Especially important is to exclude potentially life threatening issues.

ORGANIC HEADACHES

An organic headache is the result of an abnormality in the brain or skull. It can be caused by a benign or malignant brain tumor, a brain aneurysm, hematoma, meningitis, brain abscess, brain infection, cerebral hemorrhage, or encephalitis or developmental pathology such as Chiari syndromes. More frequent causes include cervicogenic headache from whiplash injuries, occipital neuralgia, discogenic and spondylitic cervical pathology, Temporal-mandibular pathology, referred otologic or dental pain, toxic responses to chemicals or allergies and sinus induced headaches

Fortunately, very few headaches (less than 5 percent) are caused by tumors, and not all people with tumors experience headaches. A tumor will cause a headache if it intrudes on arterial space or increases intracranial pressure. If there is a brain tumor, the headache will probably come on suddenly and intensely. It may get progressively worse and can be aggravated by coughing or physical activity.

Tune into symptoms that could be red flags: a sudden, sharp, intense or severe pain (particularly if the patient never or only occasionally have a headache); sudden lack of balance or falling; confusion; inappropriate behavior; seizures; difficulty speaking. If these symptoms are left undiagnosed, they can lead to serious consequences.

REBOUND HEADACHES

Over-use of medications — exceeding labeling instructions or physician's advice — can precipitate a "rebound" into another headache. This is particularly true if the patient's medication contains caffeine, which is included in many drugs because it speeds the efficacy of the other ingredients. However, as beneficial as caffeine is in this context, if you are also drinking caffeine (coffee, tea or soft drinks), then you become more vulnerable to a rebound headache.

In addition to the rebound headache, over-use can result in addiction to medications, more severe pain when they wear off, and possible serious side-effects.

One area of misperception is about headaches and caffeine. A recent panel of experts provided the following facts about this subject.

General

- Most people feel the effects of caffeine within 30 minutes.
- Generally, the effects of caffeine last 3 to 5 hours.
- The average American consumes about 200-300 mg of caffeine daily, or the equivalent of about 2-3 cups of coffee.
- People who get headaches should clearly understand how caffeine affects their headaches.

Caffeine in headache medications

- Adding 130 mg of caffeine to a regular, two-tablet dose of common ingredients found in pain relievers (aspirin and acetaminophen) makes them relieve headache pain about 40% better than they do without caffeine. Caffeine also helps your body absorb these medications, allowing you to get back to your daily life faster.
- Because analgesics work better when they have caffeine added, you may be able to take less medicine when you have a headache. And because even non-prescription medications are real medicine with the potential for side effects, taking less reduces the risks associated with inappropriate use.

Caffeine and "rebound" headache

- "Rebound headache" is a serious problem that develops from taking too many headache medications too often.
- Rebound headache is constant -- it won't go away until you completely stop taking the drugs that are causing the problem.

- Any headache medicine can cause rebound headache -- taking caffeine-containing headache medications doesn't appear to increase the risk.
- Rebound headache is rare; in fact, less than 2% of the general population is reported to suffer from rebound headache due to over use of pain relievers.

Addiction or dependence

- According to both the World Health Organization and the American Psychiatric Association, caffeine is considered safe, and in no way resembles other addictive or habit-forming drugs that lead to severe physical and social consequences.
- Significant caffeine abuse has not been reported by any culture in the world.
- When used according to label directions, headache medicines with caffeine pose no risk of addiction or dependence.

Caffeine withdrawal headache

- Technically, a person needs to use caffeine every day and reach a monthly total of at least 15 grams before they will experience caffeine withdrawal headache.
- Withdrawal symptoms occur when people consume 500 mg (about 5 cups of coffee) or more daily, but they have been reported after long-term, daily intake of 100 mg or less per day.

HORMONE HEADACHES

Women suffer migraines three times more frequently than men do; and, menstrual migraines affect 70 percent of these women. They occur before, during or immediately after the period, or during ovulation.

While it is not the only hormonal culprit, serotonin is the primary hormonal trigger in everyone's headache. Some researchers believe that migraine is an inherited disorder that somehow affects the way serotonin is metabolized in the body. But, for women, it is also the way the serotonin interacts with uniquely female hormones.

Menstrual migraines are primarily caused by estrogen, the female sex hormone that specifically regulates the menstrual cycle fluctuations throughout the cycle. When the levels of estrogen and progesterone change, women will be more vulnerable to headaches. Because oral contraceptives influence estrogen levels, women on birth control pills may experience more menstrual migraines.

Symptoms

The menstrual migraine's symptoms are similar to migraine without aura. It begins as a one-sided, throbbing headache accompanied by nausea, vomiting, or sensitivity to bright lights and sounds. An aura may precede the menstrual migraine.

The PMS headache occurs before the period and is associated with a variety of symptoms that distinguish it from the typical menstrual headache. The symptoms include headache pain accompanied by fatigue, acne, joint pain, decreased urination, constipation and lack of coordination. You may also experience an increase in appetite and a craving for chocolate, salt, or alcohol.

PMS sufferers may also complain of fear, panic attacks, decreased sexual desire, impaired judgment or memory, sensitivity to rejection and even paranoia. These symptoms usually disappear when menstruation begins.

More common types of headaches include:

Tension-Type

Approximately 90 percent of all headaches are classified as tension-type headache. The pain is typically generalized all over the head. There appears to be a slightly higher incidence of this type of headache among women, because more females than males seek treatment. There are two types of tension-type headache: those that occur on an episodic basis and those that occur daily. If chronic, this type of headache should be promptly treated to avoid developing an addiction to pain relieving drugs. The daily headache is often caused by depression or other emotional problems. Sufferers usually awaken in the morning with the headache and frequently have an accompanying sleep disorder.

Migraine

Migraine headaches can be hereditary. If both parents have them, there is a 75 percent chance their children will have them; when only one parent is a migraine sufferer, there is a 50 percent chance the child will be afflicted. If even a distant relative has migraine headaches, a 20 percent chance exists that any offspring will be prone to migraine headaches. Recent research has proven that migraines do have physical causes and triggers for many sufferers include diet, stress, menstruation, and environmental changes. The length of a migraine attack can last from several minutes to several days, totally incapacitating the sufferer in the latter case. A formal classification process was introduced in 1988 by the International Headache Society. This can be found at :

<http://www.ama-assn.org/med-sci/course/migraine/m1inter.htm>

Cluster

There is an estimated one million cluster headache sufferers in the United States, of whom 10 percent are afflicted with chronic cluster. These appear to primarily affect men with 90 percent of the sufferers being male. Although cluster headaches produce some of the most severe pain that a physician will see, they can go into long periods of remission. No cause has been determined for this type of headache, but most can be controlled with adequate treatment.

Headache in Children

Children do experience headache. Most are due to migraine or emotional problems. However, if headache occurs in the very young or very old, it is important to rule out organic disease. Young tension-type and migraine sufferers can usually benefit from non-drug treatments such as biofeedback.

In the service of education and patient care, the American Academy of Neurology has led the multidisciplinary U. S. Headache Consortium to develop an evidence-based practice parameter on migraine. Seven organizations participated in the Consortium: the American Academy of Family Physicians, the American Academy of Neurology, the American Headache Society, the American College of Emergency Physicians, the American College of Physicians-American Society of Internal Medicine, the American Osteopathic Association, and the National Headache Foundation. This unique collaboration of these organizations worked to develop a unified approach to treating migraine. Physicians from all seven groups actively participated in the project to ensure that all aspects of migraine diagnosis, treatment, and prevention were considered. The non-pharmacologic aspect of this evaluation will be presented under a separate Adobe Acrobat presentation.

In recent years there have been several studies indicating that Feverfew may be of value as a prophylactic treatment for Migraine. Some references for these are:

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