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## **GUIDELINES FOR EFFECTIVE MANAGEMENT OF MIGRAINE HEADACHES**

Migraine Headaches are an often debilitating condition affecting over 28 million people throughout the world. This often debilitating condition affects females more than males and occurs most often between the ages of 25 to 55 years old.

Once thought to be a pure vasodilatation process, it has been discovered that migraines occur through a process of peripheral sensitization, central sensitization, vasodilatation, inflammation, nociception, and improper serotonin uptake.

Migraines are characterized by an aura (hallucinations) and or prodrome (sudden mood, appetite or sleep change). Other characteristics are nausea, vomiting, head pain, cold like symptoms, a pulsating feeling, light sensitivity, and occur in a variety of locations.

They have a hormonal connection, a genetic predisposition, however no correlation with radiological findings and demonstrate no loss of mobility. Unlike other headaches they respond well to medication.

When migraines are associated with other types of headaches they are called combination headaches. The type of headache most frequently associated with is cervicogenic headaches.

Billions of dollars a year are spent on the management of migraines. There are many companies promoting fallacious products promising relief from this often chronic and painful condition. The following suggestions are some of the more effective ways of minimizing severity, duration and repeated occurrences of migraine headaches.

**Therapeutic Rehab Specialists** specialize in treating multiple types of headaches. Call us today at **(813) 876-8771** to find out how our effective treatment options can help you start living a more productive life with less pain.

- The theory of how the migraine headache process happens is when the hormone prostaglandin which is present in the bloodstream causes platelet aggregation which increases release of serotonin; a neurotransmitter that signals vasoconstriction in blood vessels to the brain. This causes ischemia throughout brain resulting in acidosis which will then lead to a dilation of blood vessels. This vasodilatation of the innervated arteries results in the headache, and the inflammation; most noticeable in the meninges prolongs the headache. After this phase a decrease in platelet aggregation occurs resulting in lowered serotonin levels causing vasodilatation. This painful irritation stimulates the brain's trigeminal nerve to trigger the release of calcitonin gene-related peptides to further inflame blood vessels and activate the meninges pain receptors. This leads to the all too common persistent migraine headache.
- Migraines are often triggered by extreme light, loud noise, rainy, snowy, or humid weather. Food triggers such as alcohol, MSG's, aspartame, chocolate or caffeine. Some drugs such as hormone replacement and oral contraceptive drugs have been found to provoke migraines. Some experts believe that migraine sufferers have a vulnerable nervous system which is acutely vulnerable to either external stimuli or internal (stress) stimuli. Carbon monoxide exposure is another sometimes missed cause of migraine headaches. Environmental factors are an often missed cause of migraine headaches.
- Migraines often respond well to medications such as (Tryptans): Imitrex, Zomig, Maxalt, Axert, Frova, and Relpax. Antiseizure medications are also helpful: Topamax. Midrin is acetaminophen plus a muscle relaxant and a drug to shrink swollen blood vessels. Antidepressants: Prozac and Elavil are also often prescribed in addition to Beta Blockers such as Lopressor, Toprol-XL, Corgard, Inderal and Tenormin. Narcotics used in more severe migraines are: Percocet, Oxycodone, Vicodin, Lortab, and Demorol. Migranal is inhalable and injectable and is as effective as Imitrex, but takes longer to act. ***(Exercise caution with Imitrex if you have a history of heart disease as it is a vasoconstrictor)***
- In cases of acute migraine headaches magnesium sulfate can be given intravenously by a physician. In a 2000 study reported in *Headache*; 87% of patients reported full relief of headache with treatment. Oral supplementation of (200-300 mg) TID of magnesium has been found to reduce the intensity and duration of migraine headaches, although did not reduce the occurrences. Magnesium also has been found to be effective in reducing menstrual migraine headaches in those found to be deficient. Cayenne pepper is a good source of magnesium. ***[Do not take magnesium supplements if you have kidney problems]*** Calcium has also been found beneficial in up to (2000 mg a day).
- Women with menstrual migraines may benefit from the use of a natural progesterone cream.

- Migraine headaches have been found to have genetic links, however comorbid conditions such as depression and epilepsy have also been found to be common in migraine sufferers. Many of the medications used in treatment of these conditions such as antidepressants and anti-seizure medications can have effects on both conditions. Natural remedies often used in decreasing depression are: Tryptophan or 5-Hydroxytryptophan @ 50 mg BID (↑ serotonin production), and Tyrosine @ 500 mg BID. Zinc, B 12 and Omega 3 fatty acids are also often used.
- Some people react adversely to dairy products such as milk, butter, cheese and cream. On the other hand, yogurt and goat milk products are sometimes better tolerated.
- Keeping a headache log is very important in figuring out when migraine headaches occur. Important information are things such as: where you're at when the migraine occurs, what you've eaten earlier that day, day of the week or time of day, weather, bright light or loud noises, medication usage, and what you're doing prior to the onset. If there is a change in your normal pattern throughout the day, and any stress that may have irritated you prior to the migraines onset. Another tip is keeping a log of your migraines when you're in a different part of the country or on a vacation. This can be important in determining environmental causes.
- While you cannot change the weather, you can prepare for bad weather conditions by being prepared and taking medication. A falling barometric pressure can induce headaches in some. If you're sensitive to light you may need sunglasses, a hat and need to limit sun exposure. If you're sensitive to humidity you may need to purchase a dehumidifier for your home or office. If you're on the internet you can go to the website: [weather.com/activities/health/achesandpains/](http://weather.com/activities/health/achesandpains/) and type in your zip code to find out if air pressure is changing for your area.
- Irregular sleep and eating schedules can be a trigger for migraine headaches. This can happen when people are on irregular work schedules and may miss meals or proper sleep from working periodic double shifts or the occasional night shift. Hypoglycemia from a poor eating schedule can induce headaches. When there is an alteration of serotonin levels and melatonin levels are decreased from irregular sleep patterns supplementation of: (3 mg BID of melatonin) may be necessary.
- Botox is not only for reducing wrinkles. Commonly used for cervical dystonia, botox has also been found to relieve migraine headaches for up to 3 months when injected to the face and scalp. While this provides temporary relief it must be repeated for consistent effectiveness.
- Using nose drops with lidocaine is a new option for delivering short term relief of migraine headaches. Although this method has been found to reduce pain in 50% of subjects, it is not as long acting as other migraine drugs such as Imitrex. This is according to a Southern California research study.

- Although it has been around for thousands of years interest in the *feverfew* plant has increased over the last decade. First used for reducing fever and other disorders, the *feverfew* plant has been used in Europe for migraine relief and prevention. A study at the University of Nottingham in England demonstrated those who took feverfew had both a 25% decrease in migraines, as well as a reduction of nausea and vomiting without side effects. This happens by decreasing serotonin secretion (during a migraine), and prostaglandin production. It has been found to be more effective in raw form such as leaves, or a tincture made from leaves. A concentration of (0.2%) of the active ingredient, parthenolide has been approved by the NHO of Canada for migraine prevention. It has been recommended to take 1 teaspoon of feverfew tincture mixed with water at the first sign of a migraine. *[Do not use during pregnancy]*
- The avoidance of certain factors can help reduce migraines such as bright lights> loud sounds, certain odors, stressful situations, lack of sleep. And allergies to things such as cigarette smoke, strong odors, humidity, dust, cold air, mold, certain carpets, paint and perfume. Oversensitivity to plastic exposure is another often overlooked factor. So you may need to avoid drinking out of plastic bottles or using plastics for serving food.
- Diet may need to be changed to organic fruits and vegetables if the person is sensitive to pesticides. Common foods that may need to be avoided due to food allergies are: wheat (gluten intolerance) dairy, corn, soy, eggs, chocolate, sugars, citrus, and nightshades (eggplant, peppers, tomatoes, potatoes). Other foods can be aged cheese, salty foods, or foods that contain tannin; such as avacados, dark beer, red wine, and nuts. Foods with artificial sweeteners (aspartame), Sulfites (used on restaurant salad bars), Nitrates (hot dogs, ham, bologna) *[capillary dilators]* and MSG's (some oriental foods) may need to be avoided. High carb diets including bread, citrus foods, and spiced foods are other possible triggers.
- You may need to try omitting foods containing the amino acid **Tyramine** including: aged meats, avocados, bananas, beer, cabbage, canned fish, dairy products, eggplant, hard cheeses, potatoes, raspberries, red plums, tomatoes, wine and yeast.
- Diverting blood flow from head to toes has been found to help some migraine sufferers. This can be done by lying down in a darkened room with an ice pack to the back of the neck and hot pack to the feet.
- While certain foods should be omitted from the diet, others should be included; of course keeping in mind possible food allergies. Foods found to be non-acidic and with a high electrical charge include: Almonds, almond milk, watercress, parsley, cucumbers, fennel, garlic, cherries, blueberries, drinking purified water with lemon, wheatgrass, broccoli, asparagus, spinach, sprouts, salmon, halibut, beets, green tea, apples and green bell pepper. The goal is to alkalize and energize.

[http://www.thewolfeclinic.com/pdf/Alkaline\\_Food\\_Chart.pdf](http://www.thewolfeclinic.com/pdf/Alkaline_Food_Chart.pdf)

- Relaxation therapy in the form of yoga, meditation and biofeedback can help in those migraineurs affected by stress. In these individuals migraines will often occur after the period of stress is over; such as after an exam, starting a new job, moving or on a holiday. These people can learn how to decrease stress induced muscle tension through this electrical device which is attached to various muscle groups in the neck and shoulders.
- Estrogen and Serotonin levels can be stabilized through vitamin supplementation such as Vitamin E (Consult Dr. for dosage), Vitamin B -2 (400 mg) a day, and vitamin B-6 (50 mg a day).
- Coenzyme Q10 has been shown to improve blood flow to the brain. This has been recommended in amounts up to (60 mg) a day. Essential Fatty Acids are needed for brain cells and fat metabolism. Primrose oil is an anti-inflammatory agent to prevent vaso-constriction.
- Cigarette smoke and secondhand smoke should be avoided as it contains over 4,800 chemicals, 69 of which are known to cause cancer. Smoking is directly responsible for approximately 90 percent of lung cancer deaths and approximately 80-90 percent of COPD (emphysema and chronic bronchitis) deaths.
- Dr. Otto Warburg demonstrated that he was able to turn normal, healthy cells into malignant cells simply by lowering the amount of oxygen available to them. Researchers believe that lack of oxygen seems to play a major role in causing cells to become malignant or cancerous. It certainly affects the quality of life of the cells.
- An example of an effective way to breathe in order to cleanse your system. You should breathe in this ratio: **inhale for a five sec, hold for 15 sec, and exhale 10 sec.** Why exhale for twice as long as you inhale? That's when you eliminate toxins via your lymphatic system. Why hold four times as long? That's how you can fully oxygenate the blood and activate your lymphatic system. Less toxins may = less headaches.

**Note:** The guidelines mentioned are meant as a source of information only. If you are suffering from health problems please consult your Physician before beginning medication, or initiating a nutrition program. With all types of headaches if there is a sudden onset, and/or your pain is severe consult a doctor immediately to rule out sinusitis, inflammation of a blood vessel or even a life threatening problem like an aneurysm or brain tumor.

***Call a doctor if you have a headache that is triggered by, accompanied by, or liked to, any of the following:***

- ***Head injury***
- ***Vomiting***
- ***Slurred speech, distorted vision, or numbness or tingling in part of the body***
- ***Exertion(including sexual exertion), bending or coughing.***
- ***Sudden severe pain***

***The information presented above is intended for informational purposes only, and should not be interpreted as specific medical advice. You should consult with a qualified healthcare provider before making decisions about therapies and/or health conditions.***

# *Migraine Headache Trigger Diary*

<b>DAY</b>	<b>Head ache Y/N (TOD)</b>	<b>Weather</b>	<b>Foods</b>	<b>Bright Light/ Loud Noise</b>	<b>Stress Level: 1-5</b>	<b>Meds or product use</b>	<b>Location/ Environment/ Sleep patterns</b>
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<b>Sun.</b>							
<b>Mon.</b>							
<b>Tues.</b>							
<b>Wed.</b>							
<b>Thurs.</b>							
<b>Fri.</b>							
<b>Sat.</b>							