

# Menstrually Related Migraine

## Background

Although only women suffer from "hormone headache," both men's and women's headaches are prompted by hormones.

You would not feel pain without them, because it is the hormones that induce the pain response. Actually, the headache may be protecting you or warning you of something more damaging in the same way that touching a hot stove alerts you to the heat and protects you from burning yourself.

The word hormone is derived from a Greek word that means to "set in motion." Hormones initiate and regulate many of your body's functions. For example, metabolic hormones regulate the way your body turns food into energy. Growth hormones control childhood development and maintain certain tissue structure in adults. Regulating hormones determine your femininity, masculinity and sexuality.

Hormones are manufactured and secreted by your endocrine glands, which include the pituitary, thyroid, parathyroid, thymus, adrenals, pancreas, gonads and other glandular tissues located in your intestines, kidneys, lungs, heart, and blood vessels. The endocrine system works with your nervous system to keep your body in balance within a constantly changing environment.

As they interact, your endocrine and nervous systems are responsible for the thousands of automatic responses that regulate your bodily functions. They decide, for example, whether you will respond to a potential headache trigger with an actual sensation of pain.

## Menstrual Migraine

Women suffer migraines three times more frequently than men do; and, menstrual migraines affect 60 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.

## **Menstrual Syndrome (PMS) Headaches**

The PMS headache occurs before your 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.

## **Treatment - Menstrually Related Migraine**

As you review these, remember that all medications have side effects, and you should discuss them with your doctor.

In general, MRM can be effectively managed with strategies similar to those used for non-MRM. Behavioral management is an important concept in menstrual as well as nonmenstrual migraine. Menstruation is one of many factors that puts women at risk for migraine. Hormonal changes are just one of many potential trigger factors.

Most sufferers of menstrually related migraine are treated with acute medications. When attacks are very frequent, severe, or disabling, preventive treatment may be required.

### **Acute Treatment**

Medications that have been proven effective or that are commonly used for the acute treatment of MRM include nonsteroidal anti-inflammatory drugs (NSAIDs), dihydroergotamine (DHE), the triptans, and the combination of aspirin, acetaminophen, and caffeine (AAC). If severe attacks cannot be controlled with these medications, consider treatment with analgesics, corticosteroids, or dihydroergotamine.

### **Preventive Treatment**

Women with very frequent and severe attacks are candidates for preventive therapy. For sufferers taking preventive medications who experience migraine attacks that break through the preventive therapy perimenstrually, the dose can be raised prior to menstruation. For sufferers not taking preventive medication, or for those with true menstrual migraine, short-term prophylaxis taken perimenstrually can be effective. Agents that have been used effectively perimenstrually for short-term prophylaxis include: naproxen sodium (or another NSAID) 550 mg twice a day; a triptan, such as frovatriptan 2.5 mg twice on the first day and then 2.5 mg

daily/ naratriptan 1 mg twice a day/ sumatriptan 25 mg twice a day/ or, methylergonovine 0.2 mg twice a day; DHE either via nasal spray or injection 1 mg twice a day; and magnesium, equivalent to 500 mg twice a day.

The triptans, ergotamine, and DHE can be used at the time of menses without significant risk of developing dependence. As with the NSAIDs, these drugs will also be more effective as preventive medications if started 24 to 48 hours before the onset of the expected MRM.

Fluoxetine, especially if the headache is associated with other premenstrual dysphoric disorder (PMDD) symptoms, can be an effective headache preventive between ovulation and menses.

### **Hormonal Therapy**

If standard preventive measures are unsuccessful, hormonal therapy may be indicated. This may involve the use of a supplemental estrogen taken perimenstrually either by mouth or in a transdermal patch. Estradiol (0.5 mg tablet twice a day, or 1 mg patch) is the preferred form of estrogen because it does not convert to the other active forms of estrogen.

For women using traditional estrogen/progesterone oral contraceptives for 21 days per month, the supplemental estrogen may be started on the last day of the pill pack. Another approach for women who take an estrogen/progesterone oral contraceptive is to take it daily - that is, without the monthly break - for 3 to 6 months. This has become accepted as a standard practice, and in Europe this approach has been used for up to a year with safety. The reduction in menstrual periods provides a method of preventive treatment.

[http://www.headaches.org/education/Headache\\_Topic\\_Sheets/Menstrual\\_Migraine](http://www.headaches.org/education/Headache_Topic_Sheets/Menstrual_Migraine)