The Headache Series

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HORMONES, MEDICATION, AND ENVIRONMENT

In most cases, frequent low-grade headaches can often be traced back to postural issues, dehydration, low blood sugar, stress, food-related allergies, clenching and grinding the teeth, or a combination of some or all of these elements. However, there are many people who also have sensitivities to environmental and hormonal triggers that could be playing a part in the persistence of frequent headaches.

Chemical Imbalances and Fluctuations

Hormone fluctuations can wreak havoc on the body in a multitude of ways, especially in women. Many women, for example, may experience an increase in headaches or migraines during certain phases of their monthly cycle, especially when estrogen is low. Headaches and migraines may also increase during peri-menopause when hormonal fluctuations are more severe, and for some women these headaches may even continue on into menopause.

In some cases, the use of birth control pills or hormone replacement therapy may help control the frequency and severity of hormone-related headaches. Unfortunately, that is not the case for everyone. Each woman is unique, and for some women the use of birth control, hormone replacement, or even consuming foods and beverages that are high in phytoestrogens (like the isoflavones found in soy products), can cause or exacerbate headache pain.

If you suspect that you have hormone-related headaches, it is important to discuss them with your doctor so that you can work together to unravel when the imbalance occurs, how it is triggered, how the headaches are related to the imbalance, and how to prevent those headaches safely and effectively. Keeping a headache journal is often an invaluable tool in tracking down the triggers and mechanisms of any headache, and especially when hormone fluctuations or other chemical imbalances may be involved.

Medication and Medication Interactions

Medication-related headaches can be tricky to unravel, but they are very real and can be quite painful. Many prescription medications have the potential to cause headaches as a side-effect all on their own, but the interaction of multiple medications taken regularly can also trigger headaches in people who may not have developed headaches with just one or two of those same medications. Some medications, particularly certain types of antidepressants, may not trigger headaches specifically, but instead they can cause tooth clenching or grinding as a side effect, which in turn can then trigger a headache through overexertion of the facial muscles.

Anyone who is taking long-term prescription medication to control a disease or disorder should be in the regular care of a primary-care physician or specialist. If you have developed headaches, or your headaches have increased in frequency or intensity since adding or adjusting a particular medication, contact your prescribing doctor as soon as possible to discuss further adjustments or alternative medications that may be safer and less painful for you.

Rebound Headaches
Pain relievers, both prescription and over-the-counter, are particularly notorious for causing medication-overuse headaches, or rebound headaches. It is ironic that the medication you seek to alleviate head pain could actually be causing it, but the truth is that all pain relievers are meant to be used infrequently as a temporary relief from an isolated headache or injury. Using prescription or over-the-counter pain relievers for headaches or other body-pain on a daily or multi-day per week basis will definitely put you at a much higher risk of triggering a rebound headache.

It is not completely clear why rebound headaches occur, but there is some suspicion that the regular use of pain medication may alter the way certain pain pathways and receptors work in the brain. Common over-the-counter pain relievers like aspirin and acetaminophen (Tylenol) often trigger rebound headaches, especially when you exceed the daily recommended dosage. Ibuprofen (Advil, Motrin, etc.) and naproxen (Aleve, etc.) are at a lower risk of causing a rebound headache, but can still be a factor in rebound headaches with overuse.

Combination pain relievers, particularly those marketed for migraines that combine caffeine, aspirin, and acetaminophen (like Excedrin), are very common triggers of rebound headaches when overused. While both aspirin and acetaminophen could be the culprit in rebound headaches associated with these combination pain relievers, do not underestimate the effects of caffeine.

The Effects of Caffeine
In small doses, caffeine can relieve the pain associated with certain types of headaches. But too much caffeine can create or exacerbate existing headache pain. How much is too much is different for every individual, but many people are ingesting far more caffeine than they are aware of.

Coffee and black teas are common sources of dietary caffeine, but do not forget that chocolate, energy drinks, and your headache medication could all be adding even more caffeine to your system – causing the very headache you are trying to alleviate. Quitting caffeine cold-turkey, however, can also trigger a fairly severe headache. If you suspect that you have too much caffeine in your diet, try and reduce that amount gradually over a period of several weeks or months.

Prescription Medication
Almost all prescription migraine medications can carry the risk of triggering rebound headaches with overuse. Fioricet, Fiorinal, Imitrex, and others have all been reported to contribute to rebound headaches. Opiates like Tylenol 3 with Codeine and others like it carry the highest risk of triggering rebound headaches and should be used sparingly and with supervision.

Headache medication is a useful tool in providing temporary pain relief and restoring some level of function to those who suffer from frequent and severe headaches. However, long-term use of any of these medications should be closely supervised by a medical professional and limited to the time period that it takes to unravel the ultimate causes of your head pain and create a preventive plan that allows you to reduce or eliminate the use of these medications to control pain.

Environmental Allergens and Toxins
Many household chemical-based cleaners, certain types of mold or mildew, chemically-treated building materials, as well as most paints, stains, and solvents release airborne toxins and allergens that can cause headaches. Proper ventilation and filtration masks should always be utilized when handling these materials at home or on the job. In some cases, prolonged exposure to these allergens and toxins can cause serious illness or even death. Do not be foolish and ignore materials that suddenly cause you to feel headachy, light-headed, or woozy when you breathe them in. Protect yourself, and find ways to limit your exposure to these materials as

much as possible.

Off-Gas
Many types of modern building materials are now chemically treated to resist rot, mold, mildew, fire, and even certain types of pests. Some of these chemical treatments may continue to off-gas for several weeks or months after being treated or installed. Certain types of paint, stains, sealers, and caulk may also continue to off-gas for several weeks even after the material appears to be dry. Even carpets that have been treated to be stain-resistant may off-gas for several weeks after installation. Often these off-gasses have a strong smell associated with them, but some do not.

In new construction or remodeling of your home, be sure that all new spaces are properly ventilated during the off-gassing phase, and that you sleep and work elsewhere until the materials are stable and no longer releasing toxins into the air.

Environmental Irritants and Stimuli
For many people, certain environmental irritants and stimulants can cause or exacerbate headaches. Light, sound, and smell can all be powerful migraine triggers, particularly when a low-grade headache is already present.

Light
Flickering light, overly bright light, and sun glare can often combine with other factors to create or increase head pain. For those with photosensitivity, flickering light can be a strong trigger for headaches and migraines. Make sure that fluorescent lights at work and at home are replaced regularly and do not try to sit and work through a situation where the light is continually flickering.

If you work under fluorescent lighting all day long, it is also good to get outside in the natural light for at least 10 minutes in the middle of the day. This has the added benefit of getting you away from your desk and the habitual body postures that could also be contributing to your head pain.

Computer screens may also be too bright or too dim and trigger an eye-strain related headache over a period of hours. Make sure you know how to adjust the brightness on your computer monitor at home and at work, and change the settings when you are working near a window during the day vs. at night.

Certainly for anyone who is light sensitive, strobe lights should always be avoided.

Sound and Smell
Sound and smell are less common triggers for the everyday headache than many of the other triggers discussed in this series. However, for migraine sufferers, sound and smell can both be powerful triggers to prolonged head pain. It is not entirely clear why these environmental stimuli effect migraine sufferers so much more than the general population, but there is suspicion that the neurological pathways in migraine sufferers are far more sensitive to stimulus in general than in those who do not suffer from migraines making it harder for them to suppress or filter loud noise or powerful odors.