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Headache Toolbox

The Truth About Triggers

Individuals with migraine frequently report that their attacks may be precipitated by "triggers." In one recent survey of 200 consecutive migraine patients referred to our headache center, over 90% identified at least one migraine attack trigger; those triggers most commonly cited were physical or emotional stress (77%), menses (72% of actively cycling females), exposure to bright or flickering light (65%), and various odors (61%).

Before we explore the more specific aspects of migraine triggers, some important general issues deserve mention:

1. No single entity, however "classic" (eg, red wine, chocolate, "stress"), acts as a trigger for *all* migraineurs.
2. In the individual migraineur, rarely does a trigger *consistently* provoke an attack.
3. As corollary to no. 2, simultaneous exposure to 2 or more triggers may be required to provoke an attack (see below).
4. What serves as a trigger may also serve as a treatment (eg, caffeine).

Current theory holds that the clinical symptomatology we define as "migraine" reflects a relatively hypersensitive brain, with that hypersensitivity likely to be genetic in origin. The migrainous brain appears inherently sensitive to changes in the individual's "internal" or "external" environment; examples of internal change include the abrupt decline in estrogen levels occurring with menses, sudden stress (or, paradoxically, release from stress), or a change in one's usual sleep pattern (eg, oversleeping on the weekend or vacation), whereas external changes commonly cited as triggers include weather changes, ingestion of alcohol, or exposure to bright or flickering light.

Following exposure to a sufficient trigger, the genetically primed migrainous brain – cocked and ready – acutely responds by initiating a cascade of clinical and electrical events that clinically are expressed as "migraine": headache, often accompanied by nausea and sensitivity to light and sound.

Again, no single trigger – however potent – is common for *all* migraineurs, and an established trigger rarely triggers a migraine attack each and every time in the affected individual. Furthermore, when attacks *are* triggered, they may involve a spectrum of migraine symptoms that extends from no headache whatsoever (ie, aura only) to a veritable pit of physical and emotional misery. For example, ingestion of red wine *at times* may induce you to suffer a migraine, but if you maintain a passionate devotion to red wine, because the wine/attack association may not be invariable and because the attacks you do experience consequent to indulging your passion may involve only minimal headache . . . you well might choose to play your cards and take your chances.

Or perhaps not if that glass of savory *rioja* is to be followed immediately by a sweet dessert; if that combination invariably produces annoying or even debilitating migrainous symptoms, it's best to leave well enough alone. Along the same line, female migraineurs may find that ingestion of red wine invariably produces migraine only when the wine is drunk in association with another common migraine trigger: menses. As noted previously, over two-thirds of our actively cycling clinic patients report menstrual aggravation of their migraine. That what has proven to be a trigger at other points within the menstrual

cycle may serve as a more consistent and potent trigger during menses is not surprising.

A word about caffeine. Finding that caffeine may trigger an attack – or learning of this potential risk from a physician, friend, or other source – a migraineur may take pains to eliminate caffeine use *entirely* . . . and recoil in horror when it's suggested that whatever oral medication is being used for acute migraine treatment be taken with a caffeinated beverage. In reality, while caffeine *can* trigger migraine in some individuals, and although caffeine overuse *can* cause migraine progressively to worsen, caffeine may prove a surprisingly effective ally in treating acute migraine. During migraine attacks the stomach's characteristic motility may stall, and oral medications thus helplessly may linger in that organ . . . unable to progress down into the small intestine where they could be absorbed into the bloodstream and exert their therapeutic effect. Caffeine can assist in restoring the stomach's motility, and beyond simply promoting absorption of oral medications caffeine may itself exert a more direct therapeutic effect on the migraine process. Not by coincidence is caffeine a component of so many of the preparations available for acute headache treatment, both over-the-counter and prescription (eg, Excedrin, Goody powders, Esgic, Fioricet, Fiorinal, Cafergot).

Finally, what about elimination diets? Such diets have both their diehard advocates and cold-eyed skeptics. Bottom line: (1) there are virtually no scientific data available to support an extremist position for or against such diets; (2) through their own life experiences, most migraineurs have identified what for them are clear triggers, dietary or otherwise, and have learned to avoid those dietary components that frequently provoke attacks; (3) to maintain regular eating habits – and specifically to avoid skipping meals – is likely to be of more benefit in controlling migraine than any specific diet; and (4) adopting a migraine "elimination diet" that is inherently healthful (eg, diets "Mediterranean" in composition) makes good sense whether it helps reduce migraine or not.

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