

More Than Just a Headache

The Four Phases of a Migraine Attack



For those who have never experienced migraine, migraine is generally considered "just a headache". To the other 12% percent of Americans who are migraineurs, however, a migraine attack often is something much more: a "whole body experience", as some patients describe it...and typically not a pleasant one. What most migraineurs may not know is that a migraine episode may contain 4 separate phases, each distinct in itself but with one phase often overlapping into another. By no means will all 4 phases occur during every migraine episode; some migraine episodes will involve only 1 of the 4, and, conversely, when multiple phases occur during an episode, the symptoms associated with one phase may overshadow those of the accompanying phases in their prominence.

So what are the individual phases?

PRODROME

The majority of migraineurs at least

occasionally experience a prodrome that most typically occur hours in advance of a migraine headache. Commonly reported prodromal symptoms are numerous and include: irritability, inexplicable sadness, euphoria, somnolence, hyperactivity, frequent urination, problems concentrating or speaking, yawning, light sensitivity and food cravings (classically for sweets). Because the symptoms are so nonspecific, the migraineur may not recognize them as being an integral part of a migraine attack. Alternatively, prodromal symptoms may be blamed as the cause of the subsequent headache. For example, prodrome-related sweet craving that leads one to eat chocolate, which in turn is followed by headache that was destined to occur in any event, may lead to the misidentification of chocolate as being a migraine "trigger".

AURA

When **aura** and prodrome occur together in the same episode, the aura phase tends to follow the prodrome. Contrary to what many believe

(including many healthcare providers), aura is not a sine qua non for the diagnosis of migraine. Only about 30% of migraineurs ever experience aura, and very few of those who do will experience an aura with every migraine episode.

The most common aura involves visual symptoms; less common but still occurring at high frequency are sensory aura and aphasic aura. The sensory aura most often is characterized by numbness and tingling that spreads from one part of the body to another (for example, from lips, tongue and cheek on one side to the hand and fingers on that same side). Aphasia implies a disorder of language, either expressive (manifested by difficulty finding and producing the desired words in a fluent manner) or receptive (difficulty comprehending what others are saying).

The hallmark of a migraine aura is that it tends to have both "positive" and "negative" features, and the aura symptoms tend to be dynamic. For example, a visual aura may involve an expanding (thus dynamic) blind spot (a negative feature) in the visual field, and at the periphery of that blind spot the affected migraineur may perceive a crescent of "zig-zags" (a positive feature) which marches repetitively across the field of vision (again, dynamic). An episode of migraine may involve only one type of aura, or a combination of aura symptoms may occur (for example, visual followed immediately by sensory). Although aura symptoms most often persist for about 15-20 minutes, many patients experience aura phases that are shorter or longer; in some rare cases, a migraineur may experience persistent visual aura that never entirely ceases.

In the majority of cases the headache phase begins as the aura fades, but in some migraineurs the aura symptoms will extend well into the headache phase or even first become apparent after the headache already has begun.

Many migraineurs with aura will experience aura symptoms with little or no temporally associated headache whatsoever. When this occurs with visual aura, healthcare providers may refer to the phenomenon as "ocular" or "ophthalmic" migraine. A more appropriate term for aura occurring in the absence of headache is simply "typical aura without headache".

There are very few disorders that can mimic a typical migraine aura. A detached retina can produce symptoms identical to migrainous visual aura, and a



sensory or aphasic TIA (transient ischemic attack=warning of stroke) at times can mimic migrainous aura, but an established history of migraine with aura symptoms typical of that which the individual is experiencing will help to exclude these mimickers. To learn more about aura, read **Aura: Migraine's Odd Companion.**

The headache phase typically follows the prodrome and the aura phase (if any), but in up to a third of migraineurs who experience aura the aura may occur during peak headache intensity.

The headache of migraine is widely variable in its severity, location and other characteristics. Migraine is the Baskin-Robbins of headache: it comes in a variety of flavors. There may or may not be associated with nausea or sensitivity to light, sound, odors, motion or a variety of other environmental stimuli. The pain may be throbbing...or not. The pain may be localized to one side of the head...or not. The pain may be worsened by head motion and by coughing/sneezing...or not.

The duration of the headache phase most often ranges from 4 hours to 3 days but at times may be briefer or more prolonged. A migraine headache that persists for more than 72 hours is characterized as *status migrainosus*, and in some unlucky migraineurs an acute migraine headache may persist indefinitely and evolve into the chronic daily headache variant of chronic migraine.

One can argue that there is a "classical" migraine headache (severe, incapacitating, pounding, one-sided, etc.), but it is an absolute truth that there is no one typical migraine headache.

POSTDROME

The last phase of a migraine attack, and one that is experienced by many migraine auras, is the postdrome. Although some degree of "background" headache still may be present during the postdrome, more notable are the sensation of feeling "washed out", fatigued, "hung over", physically clumsy, depressed or cognitively impaired

("brain fog" is a common postdromal symptom). The migraineur in the midst of a postdrome may experience scalp tenderness, an uncomfortable hypersensitivity of the skin, stiffness of the neck and back and diffuse muscle aches.

The biologic origin of postdrome currently remains as obscure is that of prodrome, and the treatment of postdromal symptoms is non-specific and not substantially different from what one does for a hangover resulting from a big Saturday night: hydration, aspirin or acetaminophen for residual low-intensity headache, modest aerobic exercise, fresh air... and wait it out. In over 90% of migraineurs who experience postdrome, the postdromal symptoms resolve within 24 hours.

In short, while the headache may be gone or largely gone during the postdromal phase, those who experience postdrome will assure you that the migraine attack is still very much active.

SUMMARY

Again, an episode of migraine may involve any combination of these phases-sometimes all 4, sometimes only 2 or 3, sometimes only 1. In regards to the last, migraineurs sometimes speak of a "migrainous day", wherein they feel generally "off" and sense that a headache is looming in the background...but no headache ever emerges; this conceivably may represent a prodrome or postdrome occurring independent of the other phases. Similarly, and as indicated earlier, many migraineurs who experience aura will at times have aura without any temporally associated headache and with or without associated prodrome or postdrome.

All permutations of migraine exist, and the clinical expression of a predisposition to migraine differs not just from migraineur to migraineur but even for a single afflicted individual.

Prodrome>aura>headache>postdrome. Migraine is indeed a multiphasic "whole body experience". **IV**