

HEADACHE Toolbox

Migraine Aura



Many people (including doctors) believe that what we term a “migraine” must involve an *aura* that is followed by one-sided throbbing, and severe headache with associated nausea, vomiting, and sensitivity to light and sound. In fact, although many of the approximately 30 million Americans afflicted by migraine do at times suffer such attacks, in only a few does their migraine *always* involve this particular array of symptoms. A migraine attack may consist of aura *only* and no headache whatsoever (more on this later), or it may be expressed as incapacitating head pain . . . or any degree of pain on the scale between these two extremes. In other words, we now believe that most – if not all – headaches suffered by a migraineur are “migraines” that result from the same underlying biologic processes.

While the majority of migraineurs experience *prodrome* with their headache attacks, only 20-25% *ever* will experience aura. Prodromal symptoms may be rather vague and non-specific, but often the

individual migraineur can identify those symptoms – euphoria, depression, hyperactivity, lethargy, a craving for sweets or salt, repetitive yawning . . . to name just a few – as reliable indicators that a headache is soon to follow.

Again, no more than a quarter of migraine patients ever will experience aura, and in only a very few will aura accompany each and every attack. The symptoms of aura are much more specific and strictly neurologic than those of the migraine prodrome. Aura symptoms typically possess both “negative” features (eg, vision loss) and features which are “positive” (eg, geometric patterns, flashing or shimmering lights, or “heat waves rising” perceived with one or both eyes).

Aura symptoms tend to be *dynamic*, building in their intensity before receding and vanishing. The symptoms usually develop gradually over 5-20 minutes and last for less than 60 minutes. Headache with features of migraine usually follows the aura, but in some

cases the headache may begin before the aura has completed, or the aura symptoms will occur without any temporally associated head pain. While prodromal symptoms can occur hours to a day or 2 before the migraine attack, headache follows immediately on the heels of an aura.

The most common migraine aura involves visual symptoms, but many migraineurs experience *sensory* aura. Sensory aura most often begins with numbness (loss of sensation: a negative feature) and tingling (an hallucination of sensation: a positive feature) of the lips and tongue on one side of the face, spreading to involve the cheek and then gradually extending to involve the hand on that same side. Many patients with sensory aura describe “heaviness” of the affected arm, and, not surprisingly, sensory aura frequently is misdiagnosed as a warning of stroke or – less often – a partial seizure. Patients may experience both visual and sensory aura within the same migraine attack, with the symptoms occurring in succession over a period of 5 minutes or more.

Aura symptoms are believed to arise as a result of electrochemical changes occurring in that portion of the brain which is relevant to the symptoms (eg, visual aura results from an electrochemical event arising within the occipital lobes, the brain area which is primarily responsible for processing vision).

Whether that same electrochemical event is the origin of migraine head pain remains a source of controversy within the scientific community.

Aura symptoms quite commonly occur without any associated headache, and many migraineurs report that with aging their aura symptoms become more prominent while the headache portion of their migraine attacks lessen or vanish entirely. Again, these episodes of aura without headache occurring in the older patient population frequently are mistaken to be indicators of impending stroke.

If you are one of the minority of migraineurs who frequently do experience aura prior to headache onset, you may use this association to increase the effectiveness of the medication you administer for acute migraine treatment. Early treatment of migraine is critical to achieving a total elimination of symptoms and lowering the chance of early headache recurrence. Think of your aura as an ally . . . not an alien.

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