At most, only 30% of migraineurs have classic aura. The same patient may have migraine headache without aura, migraine headache with aura as well as migraine aura without headache. If sufficient criteria but one are present, the headache is called as probable migraine.
**General rule:** To establish diagnosis of migraine under the IHS classification certain clinical features must be present and organic disease must be excluded.

**MIGRAINE CLASSIFICATION**

IHS Classification ICHD-II

*Headache Classification Subcommittee of the International Headache Society*

*The International Classification of Headache Disorders: 2nd edition*
I MIGRAINE

1. Migraine without aura
2. Migraine with aura
   • typical aura with migraine headache
   • typical aura with nonmigraine headache
   • typical aura without headache
   • familial hemiplegic migraine
   • sporadic hemiplegic migraine
   • basilar-type migraine

3. Childhood periodic syndromes that are commonly precursors of migraine
   • cyclic vomiting
   • abdominal migraine
   • benign paroxysmal vertigo of childhood
I MIGRAINE

4. Retinal migraine
5. Complications of migraine
   • chronic migraine
   • status migrainosus
   • persistent aura without infarction
   • migrainous infarction
   • migraine – triggered seizures

6. Probable migraine
   • Probable migraine without aura
   • Probable migraine with aura
   • Probable chronic migraine
A migraine attack usually lasts less than a day
When it persists for more than 3 days the term status migrainosus is applied
Although migraine often begins in the morning, sometimes awakening the patient from the sleep at dawn, it can begin at any time of the day or night
The frequency of attacks is extremely variable, but the median frequency is 1.5 monthly

The diagnosis of migraine with aura (MA) requires at least two attacks with any two of three features:
• one or more fully reversible aura symptoms
• the aura developing over more than 4 minutes, but lasting less than 60 minutes
• the headache following the aura with a free interval of less than 60 minutes
Migraine with aura is subdivided as according to the Table above
Aura usually lasts **20 to 30 minutes** and typically **precedes the headache**, but occasionally it occurs with headache or only during the headache.

In contrast to a transient ischemic attack (TIA), the migraine aura **evolves gradually** and typically is consisted of both **positive** (scintillations...) and **negative** (scotoma, numbness...) **features**.

Almost any symptom or sign of brain dysfunction may be a feature of the migraine aura, but commonly the **aura is visual**.
➢ If the aura lasts for more than one hour, but less than one week than that episode is called MA and an atypical feature

➢ If the signs persist for more than 2 weeks, without the neuroimaging evidence of infarction, such an episode is called persistent aura without infarction

➢ But if neuroimaging procedure demonstrates a stroke, it means that a migrenous infarction has occurred
Particularly in mid or late life the migraine aura may not be followed by the headache.

Associated symptoms of migraine such as nausea, phonophobia or photophobia, may occur before headache, as part of premonitory phase.
CLINICAL FEATURES OF MIGRAINE

The migraine attack can be divided into 4 phases:

- **premonitory** (occurs hours or days before the headache)
- **the aura** which immediately precedes the headache
- **the headache** itself and
- **the postdrome**

Premonitory phenomena can consist of:

- **psychological** symptoms
- **neurological** symptoms
- **general** symptoms
Psychological
- Depression or euphoria, irritability, restlessness, mental slowness, hyperactivity, fatigue, drowsiness

Neurological
- Phonophobia and photophobia, hyperosmia...

General symptoms
- Stiff neck, cold feeling, increased thirst, constipation, or diarrhea, fluid retention, swelling...

Two types of migraine premonitory are described:
- nonevolutive (precedes the attack by up to 48 hours)
- evolutive (one which starts approximately 6 hours before the attack, gradually increases in intensity and culminate in the attack; a dopaminergic mechanism has been suggested)
In migraine, the headache may begin before or simultaneously with the aura, or the aura may occur in isolation.

- Rarely auras may occur repeatedly.
- This may be many times an hour for as long as several months.
- These have been termed migraine aura status, but other organic causes must be considered.

**Visual aura** is the most common of the neurological events in migraine.

- It occurs in up to 99% of patients who have an aura and often has a hemianopic distribution.
- Visual (scotoma, geometric forms, fortifications...)
- Visual Hallucinations or Distorsions (metamorphopsia, macropsia, mosaic vision...)
- Sensory (paresthesias often lasting for minutes...)
- Olfactory (hallucinations...)
- Motor (weakness or ataxia)

- Language (dysarthria, aphasia...)
- Delusions and Disturbed Consciousness (déjà vu...)
- Periodic neurological phenomena which may be the migraine aura can occur in isolation, without the headache
  - Differential diagnosis:
    - TIA
    - focal seizures

- Introduction
- Classification
- Migraine
- Premonitory
- Aura
- Headache
- Postdrome
- Variants
- Ddg
- Migraine headache is bilateral in 40% and unilateral in 60% of cases.
- It consistently occurs on the same side in 20% of patients.
- The intensity of migraine pain varies greatly, ranging from annoying to incapacitating, but majority of patients report at least moderate pain.

- Associated phenomena:
  - Nausea occurs in 90% of patients, and vomiting in one third of them (gastric emptying can be delayed and oral drug absorption impaired during the attack).
  - Neck pain is common in patients with migraine, occurring in 60-90% of migraines studied.
Following the headache the patient may have impaired concentration or feel tired, washed out or irritable.

Hemiplegic migraine
- The HIS has divided hemiplegic migraine into sporadic and familial forms, both of which typically begin in childhood and cease with adulthood.
- FHM I, FHM II, FHM III
- Retinal (ocular) migraine
- Retinal migraine is a **rare condition**, most commonly in young adults, in which monocular scotoma or blindness accompanies migraine headache
- Retinal migraine is most likely caused by **spasm of the ophtalmic artery**
- Spreading depression of retinal neurons could explain some cases
Basilar migraine
- In this type of migraine variants the aura generally lasts less than one hour and headache may be occipital
- A typical hemianopic field disturbance can rapidly expand to involve all visual fields leading at times to temporary blindness

Vestibular migraine
- This diagnostic entity attempts to describe the overlap of dizziness and migraine and is not well described by HIS basilar migraine
Confusional migraine

More commonly in boys, with an incidence of about 5%

It is characterized by a typical aura (headache may be insignificant) and confusion which may precede (agitation, memory disturbance, violent behavior)

EEG may be abnormal during the attack

Abdominal migraine

It occurs in approximately 5% of children and is consisted of recurrent abdominal pain

It may also occur in adults

The pain is typically midline, lasts from 1 up to 72 hours and is associated with anorexia, nausea, vomiting and/or pallor
Differential diagnosis:
- CADASIL
- MELAS
- Benign Idiopathic Thunderclap Headache

The Migraine as a Devil's act, 19th Century - France.
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