Quick overview of Primary Headaches

According to the International Classification of Headache Disorders 3rd ed (www.ichd-3.org), there are four types of primary headache disorders:

1. Migraine
2. Tension-type headache
3. Trigeminal autonomic cephalalgias
4. Other primary headaches

Differentiation of the abovementioned types can be difficult. So here is an overview.

1. **Migraine:**

   **Diagnostic criteria for migraine WITHOUT aura**

   A. At least five attacks fulfilling criteria B-D
   B. Headache attacks lasting 4-72hr
   C. Headache has at least two of the following four:
      1. unilateral location
      2. pulsating quality
      3. moderate or severe pain intensity
      4. aggravation by or causing avoidance of routine physical activity
   D. During headache at least one of the following:
      1. nausea and/or vomiting
      2. photophobia and phonophobia

   (for criteria for migraine with aura - go to www.ichd-3.org/1-migraine/1-2-migraine-with-aura/)

2. **Tension headaches:**

   Clinically, migraine and tension headaches are the most common. Goadsby (2) comments:

   "**Migraine at its simplest level is headache with associated features, and tension-type headache is otherwise featureless.**"
3. **Trigeminal Autonomic Cephalalgia (TAC):**

TAC is headache with prominent ipsilateral cranial parasympathetic autonomic features such as lacrimation, rhinorrhea, nasal congestion, eyelid edema, ptosis etc.

4. **“Other primary headaches”**

are clinically heterogeneous. These include primary exercise headache, cold-stimulus headache, and many others.

**The pathophysiology of the headaches**

is, in short, poorly understood. However current understanding is that most primary headaches have something to do with **neurovascular involvement of trigeminovascular system** (2) that consist of the following key structures:

- the large intracranial vessels and dura matter
- the peripheral terminals of the trigeminal nerve that innervates these structures
- the central terminals and second-order neurons of the trigeminal nucleus

It is proposed that these structures undergo pain-inducing process, resulting in sensitisation of nociceptors, vascular changes (e.g. vasodilation), and other phenomena including autonomic symptoms (2-4). Vascular changes were once considered as the major cause; that is no longer the case. Instead central sensitization and sensitization of the nociceptors at the trigeminovascular system is seen as the major contributor (3-5).

If you are interested in reading more: you can visit [www.ichd-3.org](http://www.ichd-3.org). You can also visit our blog for other articles: [www.2will.co.nz/pain-blog](http://www.2will.co.nz/pain-blog).

**References**


