Is a Hemicranial Headache Always Migraine?

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The first step in evaluating a headache patient is to identify or exclude potential causes of headache based on a thorough history and examination. Once secondary headache disorders are excluded, the clinician can diagnose a primary headache disorder. The most important tool for making a correct headache diagnosis is a detailed history. One of the key elements of the headache history is the location of pain, with particular attention given to the involved side(s). There are a number of primary headache disorders where unilateral or hemicranial pain supports the diagnosis. The most important disorders include migraine, the trigeminal autonomic cephalalgias and hemicrania continua. One secondary disorder that will also be discussed is cervicogenic headache.

A migraine headache is typically unilateral; however, only about 60% of migraine sufferers have hemicranial pain. Approximately 15% of migraine attacks may be unilaterally side-locked and while typically benign if associated with aura, a concern for an underlying AVM should be strongly considered. The pain is often pulsating, moderate to severe in intensity, and aggravated by routine physical activity. Each untreated or unsuccessfully treated attack typically lasts from 4 to 72 hours without treatment. The presence of photophobia and phonophobia or nausea and/or vomiting as accompanying phenomena is a criterion for the diagnosis of migraine. Some patients experience variable sensations, referred to as prodromal symptoms, antecedent to their attacks of migraine headache. These symptoms may include psychological, neurological or constitutional phenomena.

The trigeminal autonomic cephalalgias (TACs) include cluster headache, the paroxysmal hemicranias and short-lasting neuralgiform headache with conjunctival injection and tearing (SUNCT). Each of these disorders occurs in an episodic and chronic form. All of them have in common the occurrence of unilateral pain in the distribution of the first division of the trigeminal nerve and ipsilateral autonomic features.

Unlike migraine, the pain of cluster headache is invariably unilateral and side-locked for every attack and during every cluster period (the interval of time containing sequential attacks). Cluster headache attacks are briefer than migraine headaches, lasting 15 to 180 minutes. Although autonomic symptoms such as lacrimation, conjunctival injection, nasal congestion, ptosis, miosis, eyelid swelling and rhinorrhea may accompany some migraine attacks, they are much more prominent in cluster headache and other TAC syndromes. A curious, and often helpful, point of distinction between cluster and migraine headaches is the contrasting behavior of sufferers during the attacks. Migraine patients typically retire to a dark and quiet room and attempt to sleep, whereas the cluster sufferer is
agitated and restless, preferring to pace about frantically. Nausea, vomiting, photophobia, and phonophobia have been reported as accompaniments to cluster headache attacks, but are more common and prominent with migraine headaches. Prodromal and aura symptoms are uncommon in patients with cluster headache, and the pain of cluster headache begins abruptly and escalates rapidly. While migraine is often present upon awakening, cluster headache often wakes one from sleep at a specific time each night.

In addition to cluster headache, other TACs include paroxysmal hemicrania and the short-lasting neuralgiform headache with conjunctival injection and tearing (SUNCT) syndrome. The differences between cluster headache and the other trigeminal autonomic cephalalgias are the duration and frequency of daily attacks and their responses to particular treatments. Cluster headache typically lasts from 15 to 180 minutes and occurs one to eight times daily; the paroxysmal hemicranias are brief (2 to 45 minutes), but occur more frequently (one to 40 attacks daily). Cluster headache occurs more frequently in men, while episodic paroxysmal hemicrania usually affects women. The SUNCT syndrome has an extremely brief attack duration (5 to 240 seconds) and greater attack frequency (one daily to 30 an hour).

The diagnosis of hemicrania continua is often overlooked. It is a continuous, exclusively one-sided, moderately severe headache with occasional painful exacerbations. The autonomic features in hemicrania continua are less prominent than they are in cluster headache and the paroxysmal hemicranias. Unlike cluster headache and the SUNCT syndrome, the paroxysmal hemicranias and hemicrania continua show a dramatic therapeutic response to indomethacin.

Cervicogenic headache is characterized by unilateral, nonthrobbing pain emanating from a source in the neck with radiation to one or more regions of the head. Clinical features may include neck pain, focal neck tenderness, exacerbation of pain by neck movements or pressure over points in the neck, reduced range of motion in the neck and migrainous features of photophobia, phonophobia, nausea or vomiting. Since many of these features can occur in other headache disorders such as migraine and tension-type headache, a diagnostic blockade of cervical structures or nerves is required to establish this diagnosis.

Reference: