

## Treating Chronic Migraine in Family Practice

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**Received:** December 17, 2019; **Published:** January 11, 2020

### Abstract

**Background:** Migraine is one of the most common debilitating disorders in primary care. It is a complex disorder characterized by recurrent episodes of headache.

**Aim:** The review aims to treating chronic migraine in family practice.

**Conclusion:** Migraine is the most common disabling brain disorder. Chronic migraine, a condition characterized by the experience of migrainous headache on at least 15 days per month, is highly disabling. The underlying causes of migraines are unknown however, believed to involve the nerves and blood vessels of the brain and the tendency to migraine is genetic. Chronic migraine treatment requires preventive medications taken on a regular basis, and acute treatments taken when attacks occur.

**Keywords:** *Chronic Migraine; Family Practice; Chronic Migraine in Family Practice*

### Introduction

Migraine is one of the most common debilitating disorders encountered in primary care. Migraine is characterized by recurrent episodes of headache, most often unilateral. In some cases it is associated with visual or sensory symptoms collectively known as an aura that arise most often before the head pain but that may occur during or afterward [1]. In the United States, approximately 18% of women and 6% of men have migraine headaches, 51% of them report reduced work or school productivity [2]. Migraine affects roughly 12% of the adults in occidental countries [3,4]. Also, it affects over 20% of people at some point in their lives; epidemiological studies have shown that 4.5% of the population of Western Europe has headache on at least 15 days per month [5].

Chronic migraine is the term that the International Classification of Headache Disorders (ICHD) uses to describe patients with frequent headaches, believed to be biologically migrainous [6]. The meaning of the term 'chronic migraine' has evolved over the last two decades, as it has steadily replaced earlier terminology such as 'chronic daily headache' and 'transformed migraine' [7]. Chronic migraine represents 7.7% of people with migraine, with a U.S. prevalence of 0.9% [8]. Migraine is a disabling disorder that places a large number on patients and society [9]. It ranks among the top 20 causes of the disease burden as per the years lived with disability (YLD) criteria [10]. Migraine is second highest cause of years lost due to disability according to findings from the Global Burden of Disease Study, interfering with occupational, educational, household, family, and social responsibilities, and the second highest contributor to neurological disease burden [11,12]. Approximately 90% of the migraineurs have moderate or severe pain, three quarters have a reduced ability to function during the headache attacks, and one-third requires bed rest during their attacks [13,14].

### Causes of migraine

Migraine was considered to be a vascular disorder that resulted from intracranial vasoconstriction followed by rebound vasodilation [1]. The causes of migraines are unknown. It is believed to involve the nerves and blood vessels of the brain [15,16]. It is thought to be caused by a mixture of environmental and genetic factors [17]. It has a strong genetic component. 70% of migraine patients have a first-degree relative with migraine history. Migraine risk is increased 4-fold in relatives of people who have migraine with aura [18]. The attacks may be induced by one or several triggering factors in combination with an altered mitochondrial energy metabolism, a dysfunction in ion transport over cell membranes in the central nervous system (CNS), low levels of magnesium in brain tissue, and altered levels of signal substances such as 5-HT (serotonin), which are all plausible causes of neuronal hyper excitability [19]. The most common triggering factors are relaxation after stress and estrogen-depletion. Less often, irregular meals, alcohol, weather changes, certain types of light, odors or food trigger attacks [20]. Hormone levels changes more likely to occur around menstruation may play a role, other hormonal influences such as menarche, oral contraceptive use, pregnancy, and menopause also play a role [21,22]. Some psychological conditions are associated like depression, anxiety, and bipolar disorder.

### Classification of migraine

Migraines were first classified in 1988. The International Classification of Headache Disorders included diagnostic criteria for Chronic Migraine among the primary headache disorders [23]. Migraine is classified as migraine with aura, migraine without aura, and Chronic Migraine. Migraine without aura is the most common subtype. This is a chronic headache disorder generally considered to manifest itself in attacks lasting 4 – 72 hours. Typical characteristics of headaches are unilateral location, pulsating quality (throbbing or varying with the heartbeat at rest or with movement), moderate or severe intensity, aggravation by routine physical activity and associated nausea, photophobia and phono phobia [24]. Migraine with aura can be distinguished by recurrent, slowly developing attacks with lateralized and reversible visual, sensory, speech, motor, or retinal symptoms; attacks followed by headache and migraine symptoms [23].

### Diagnosis of migraine

Diagnosis of migraine requires that the patient has experienced at least 5 attacks that fulfill the following 3 criteria and that are not attributable to another disorder [25]. 1) Headache attacks must last 4 – 72 hours (unsuccessfully treated). 2) Headache must have the following characteristics: unilateral location, pulsating quality, moderate or severe pain intensity and aggravation by or causing avoidance of routine physical activity. 3) During headache attack, the patient experiences nausea or vomiting or photophobia and phono phobia.

The diagnosis of migraine lies in the history, and that the purpose of examination is primarily to look for other problems that may be exacerbating an underlying tendency to migraine, accurate history taking is vitally important in the diagnosis of migraine [26].

ID-CM is a screening tool that may be useful in diagnosis. It is a twelve item screening tool for chronic migraine with sensitivity of 82% and a specificity of 87% compared with semi-structured clinical interviews [27]. Chronic Migraine experts recommend initial elimination of secondary headache causes in the absence of risk factors, and presence of systemic illness [28].

### Treatment of migraine

There are three broad approaches to treating chronic migraine: lifestyle and trigger management, acute treatments (i.e. those taken during attacks or exacerbations of chronic pain), and preventive treatments (medication or other interventions designed to reduce the tendency to have attacks) [26]. Chronic migraine treatment requires preventive medications taken on a regular basis, and acute treatments taken when attacks occur (to relieve pain and restore function) [29]. The important steps in treating CM include a complete and correct diagnosis (which rules out secondary causes) and the consideration of exacerbating factors, especially other pain syndromes. Once these factors have been considered, new evidence-based pharmacotherapeutic treatment options-both preventive and acute-should be tried [30]. Once a diagnosis of CM is made, a treatment plan should be developed. This includes evaluating and treating mood disorders, minimizing stress, practicing good sleep hygiene, and avoiding triggers. Other comorbid factors should be addressed, including sleep disorders, neck pain, fibromyalgia, and obesity [30]. One-half of persons treat migraine headaches with nonprescription medications. Patients present to physicians after unsuccessfully trying multiple nonprescription therapies [31]. Several medications are available to treat migraine. NSAIDs analgesics may be first-line treatment for mild to moderate migraine or severe migraine [32]. Evidence of their efficacy in at least one placebo-controlled study has been obtained for acetylsalicylic acid (ASA) up to 1000 mg [33], ibuprofen 200 - 800 mg [34], diclofenac 50 - 100 mg and for paracetamol 1000 mg.

Triptans are first-line treatment of moderate or severe migraine, or mild attacks that have not responded to nonprescription medicines and migraine-specific drugs that bind to serotonergic receptors [32]. Sumatriptan is the most extensively studied medication in the history of migraine. Its emergence onto the market generated intense pharmaceutical research and the development of a number of second-generation agents, including almotriptan, eletriptan, frovatriptan, naratriptan, rizatriptan and zolmitriptan [24].

A previous study found that all triptans are similar in effectiveness and tolerability [35]. Ergotamine and dihydroergotamine are old medications still prescribed for migraines [36]. Chronic Migraine may not be as easy to treat as episodic migraine, but there are new preventive therapies that make it easier. Patients should understand that migraine is a very real disorder that may be treated with preventive and behavioral therapy with minimal use of acute or “rescue” therapies [37].

### Conclusion

Migraine is the most common disabling brain disorder. Chronic migraine, a condition characterized by the experience of migrainous headache on at least 15 days per month, is highly disabling. The underlying causes of migraines are unknown however, believed to involve the nerves and blood vessels of the brain and the tendency to migraine is genetic. Chronic migraine treatment requires preventive medications taken on a regular basis, and acute treatments taken when attacks occur.

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**Volume 16 Issue 2 February 2020**

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