



ISSN 2456-3110

Vol 4 · Issue 4

July-Aug 2019

# Journal of **Ayurveda and Integrated Medical Sciences**

*www.jaims.in*

# JAIMS

An International Journal for Researches in Ayurveda and Allied Sciences



Charaka  
Publications

Indexed

## An Ayurvedic approach in the management of Migraine : A Review Study

**Komal Bisht<sup>1</sup>, Sheweta Kotwal<sup>2</sup>, Vandana Vidyarthi<sup>3</sup>, Daya Shankar Singh<sup>4</sup>, Preeti Pahwa<sup>5</sup>**

<sup>1,2</sup>Post Graduate Scholar, <sup>3</sup>Professor, <sup>4</sup>Associate Professor, <sup>5</sup>Assistant Professor, Department Of Shalakya Tantra, Patanjali Bharatiya Ayurvigyan Eevam Anusandhan Sansthan, Haridwar, Uttarakhand, INDIA.

### ABSTRACT

Migraine is the most common disabling condition mostly in adult population and shows female predominance. Unilateral throbbing type moderate to severe intensity headache could be a common manifestation of the migraine, through it may present with varied presentation. In modern science, currently no cure for migraine, despite the fact that various medicines are accessible to help facilitate the manifestation. It only helps erase the symptoms. Ayurveda believes in treating the root cause of disease. Therefore, treatments focus on balancing the vitiated *Doshas* and restore healthy balance in the mind, body and soul. This can be achieved by avoiding triggering factor, good dietary habits, *Yoga*, meditation, herbal formulation, lifestyle modification, *Panchakarma*, *Kriyakalpa* and other holistic modalities to create a balanced physiology.

**Key words:** *Migraine, Ayurveda, Doshas, Panchakarma, Yoga, Kriyakalpa.*

### INTRODUCTION

The most common form of vascular headache is migraine. Migraine is characterized by episodic, throbbing hemi cranial headache. It is recurrent headache associated with nausea, vomiting, visual disturbance and phonophobia.

In the Global Burden of disease study 2010 (GBD 2010), it was ranked as the third most prevalent disorder in the world. In Global Burden of disease study 2015 (GBD 2015), it was ranked the third-highest causes of disability worldwide in both males and females under the age of 50 years.<sup>[1]</sup>

Migraine is listed as the sixth most disabling disorder globally by the world health organization, and the most disabling of all neurological disorders. Migraine is a common, multifactorial, disability, recurrent, hereditary neurovascular headache disorder. A migraine headache is a type of headache that tends to recur in an individual and causes moderate to severe pain. The pain is often described as throbbing or pulsing and usually begins on one side of the head. Migraine headache are worsened by physical activity, light, sound or physical movement. The pain typically last from 4 hours upto 3 days.

### MATERIALS AND METHODS

Different classical texts of Ayurveda, Modern medicine books, physiology books and old articles were scanned for references regarding.

### Definition of Migraine

The international headache society defines migraine as a recurrent primary headache disorder resulting in attacks that last 4-72 hours. Typically, the headache is unilateral, pulsating, moderate or severe in intensity, aggravated by routine physical activity, and associated with nausea or photophobia and phonophobia.<sup>[2]</sup>

#### Address for correspondence:

**Dr. Komal Bisht**

Post Graduate Scholar, Department Of Shalakya Tantra, Patanjali Bharatiya Ayurvigyan Eevam Anusandhan Sansthan, Haridwar, Uttarakhand, INDIA.

**E-mail:** kbisht997@gmail.com

Submission Date: 23/07/2019

Accepted Date: 22/08/2019

Access this article online

#### Quick Response Code



Website: [www.jaims.in](http://www.jaims.in)

Published by Maharshi Charaka Ayurveda Organization, Vijayapur, Karnataka (Regd) under the license CC-by-NC-SA

### Epidemiology<sup>[3]</sup>

Migraine affects three-times more in women than in men, with this higher rate being most likely hormonally-driven.

Migraine is the third most common disease in the world (behind dental caries and tension type headache) which an estimated global prevalence of 14.7% (that's around 1 in 7 people). Migraine is more prevalent than diabetes, epilepsy and asthma combined. Chronic migraine affects approximately 2% of the world population. Research suggests that 3,000 migraine attacks occur every day for each million of the general population. This equates to over 190,000 migraine attacks every day in U.K.

### Signs and Symptoms

There are four possible phases to a migraine, although not all the phases are necessarily experienced.

- The prodrome, which occurs hours or day before the headache.
- The aura, which immediately precede the headache.
- The pain phase, also known as headache phase.
- The postdrome, the effects experienced following the end of a migraine attack.

**Migraine prodrome:** The prodrome phase also called pre-headache phase, it begins hours today (upto two days) prior to a migraine attack. This phase may be experienced hours or even days before a migraine attack.

#### Common signs and symptoms of the prodrome phase include:

- Increased or decreased levels of activity from normal (e.g. feeling more energized or sleeping more)
- Emotional changes, like experiencing a low mood.
- Food craving
- Nausea
- Repetitive yawning
- Tiredness

- Cognitive problems - like difficulty reading and writing.
- Neck stiffness
- Light or sound sensitivity

**Migraine Aura:** Auras can be frightening, if not strange experiences. They tend to creep up slowly and be so short (a few minutes) that some people even question if it was real. Also, some people experience longer auras, upto one hour. The good news in that aura symptoms are reversible they do go away. Examples of common aura signs and symptoms include:

Seeing flashing, waving, zigzag lights or sports (sometimes they appears to march across your field of vision)

- Blurry vision
- Blind spots
- Increase sensitivity to touch
- Decrease sensation
- Difficulty speaking or finding words
- Seeing, hearing, or smelling things that are not there are not
- Muscle weakness
- Numbness and tingling (on the side of the body where the migraine pain is located)

**Migraine headache:** The pain of the headache can range from mild to severe. The headache phase of a migraine attack is characterized by a throbbing or pulsating head pain, almost like someone is breath a drum on their brain. A migraine usually lasts 4 to 72 hour if untreated. The frequency with which headaches occur varies from person to person. Migraine may be rare, or strike several times a month. Headache pain is usually unilateral (on one side). This pain can shift to the other side or become bilateral.

- Pain that feels throbbing or pulsing
- Blurred vision

**Migraine postdrome:** The final phase, known as postdrome, occurs after a migraine attack. Once the headache is over, the migraine attack may or may not be over. The postdrome follows immediately afterward the pain of a migraine subsides, a person often feels wiped out. In fact, many people describe this phase as feeling like they are “hangover” or “out of it”. It’s thought to be due to abnormal blood flow throughout the brain, which can last upto one whole day after the headache phase.

- Common symptoms of the postdrome phase include:
- Feeling down (although some; people actually experiences an elevated mood)
- Confusion
- Moodiness
- Dizziness
- Sensitivity to light and sound
- Difficulty thinking or paying attention

### Pathophysiology

#### 1. Vascular theories

This theory was introduced by Thomas Willis in 1930's (Harold wolff became the first researcher to place migraine on a scientific basis, wolf measure the diameter of the extacranial (temporal) arteries in patients suffering migraine attacks and found them to dilated. These patients were treated with vasoconstrictors (ergotamine) which relives the pain and decrease the arterial dilatation. Vasoconstriction occurs during an aura where after dilatation leads to headache.

#### 2. Neurogenic theory

According to which the excessive excitement of nerve cell in the cerebral cortex is the origin of migraine.

It is focuses on the cause of the migraine pain and is currently linked to activation of the trigeminovascular system. The trigeminovascular theory focuses on the relationship between the trigeminal nerves and intracranial vessels.

### International Headache Society Diagnositis Criteria for Migraine<sup>[4]</sup>

#### A) Without aura:

- a) At least five attacks fulfilling criteria B-D
- b) Headache attacks lasting 4-72 hr (untreated or unsuccessfully treated)
- c) Headache has at least two of the following four characteristics:
  1. Unilateral location
  2. Pulsating quality
  3. Moderate or severe pain intensity (inhibit or prohibits daily activities)
  4. Aggravation by or causing avoidance of routine physical activity (eg, walking or climbing stairs)
- d) During headache at least one of the following:
  1. Nausea and/or vomiting
  2. Photophobia and phonophobia

#### B) With aura:

- a) At least two attacks fulfilling with at least three of the following: criteria B and C.
- b) One or more of the following fully reversible aura symptoms:
  1. Homonymous visual disturbance
  2. Unilateral paresthesias and / or numbness
  3. Unilateral weakness
  4. Aphasia or unclassifiable speech difficulty
- c) At least three of the following six characteristics:
  1. At least one aura symptom spreads gradually over  $\geq 5$  minutes
  2. Two or more aura symptoms occur in succession
  3. Each individual aura symptom lasts 5-60 minutes<sup>[1]</sup>
  4. At least one aura symptom is unilateral<sup>[2]</sup>

5. At least one aura symptom is positive<sup>[3]</sup>
6. The aura is accompanied, or followed within 60 minutes, by headache.

### Treatment

Migraine can be treated with two types of drugs:

- Abortive
- Preventive

#### 1. Abortive

The goal of the abortive treatment is to stop a migraine once it starts. Abortive medications stop a migraine when we feel one coming or once it has begun. Abortive medications can be taken by self-injection, mouth, skin patch or nasal spray. These forms of medication are especially useful for people who have nausea or vomiting related to their migraine, and they work quickly.

#### 2. Preventive medications

These types of drugs are taken regularly, often on a daily basis, to reduce the severity or frequency of migraine. This type of treatment is considered if migraines occur frequently, typically more than one migraine per week, or if migraine symptoms are severe. The goal is to lessen the frequency and severity of the migraine attacks. Medication to prevent a migraine can be taken daily.

### Ayurvedic Treatment

#### Shodhana Therapy

- *Nasya*<sup>[5]</sup>
- *Shiravedha*

#### Shamana Therapy

- *Shirolepa*
- *Shirobasti*<sup>[7],[5]</sup>
- *Aganikarma*<sup>[5]</sup>

#### Rasaushadhi

- *Shira Vajra Rasa*
- *Ardha Nareeswar Rasa*

- *Shiro Rogahara Rasa*
- *Maha Lakshmi Vilas Rasa*

#### *Kwatha*

- *Pathyadishadangam Kwatha*<sup>[8]</sup>
- *Pathyadi Kwatha*<sup>[9]</sup>

A healthy diet to manage migraine headache includes: fruits, vegetable boiled vegetable soup, cooked rice and buttermilk.

Yoga and meditation are extremely useful in pain condition under expert yoga consultant.

### DISCUSSION

#### *Nasya Karma* or *Shirovirechana*

*Nasya Karma* or *Shirovirechana* is best treatment for all type of headache and in migraine also. It is the best treatment either to pacify the *Doshas* from *Urdhajatru Pradesha*. The olfactory nerve entering olfactory mucosa of nose carrying the sheath of dura, arachnoid and pia. They direct enter into the brain olfactory striae are extensively connected to the limbic system. Stimulation and nourishment of nerve ending through *Nasya* alter the pathology of migraine.

#### *Shiravedha*

This treatment is indicated by different *Acharyas* in context to *Shirashool*. *Shiravedha* is considered to be the half or just sometimes the complete treatment. In migraine, *Shiravedha* is carried out in *Sira* near the nose, *Lalata* or *Apanga Pradesha*.

#### *Shirolepa*

*Shirolepa* is an Ayurvedic techniques which is considered to be extremely effective in treating to migraine and mental exhaustion caused due to stress. It is a specific technique in which various Ayurvedic herbs are mixed to make pastes; medicated oil is applied to the head and body. The scalp is then covered and tied with special kind of leaf which is interacting well with the scalp and provide relaxation and nourishment. The paste is kept over the vertex (head) for 4 hours. Then the paste and oil are wiped off.

### Shirodhara

*Shirodhara* is an Ayurvedic therapy that has profound impact on the nervous system. A thin stream of liquid (mostly, warm oil) is poured in a continuous stream over the forehead, the area where our nerves are highly concentrated. At the point when the oil is poured continuously, the pressure of the oil creates a vibration over the forehead. The vibration is amplified by the hollow sinus present in the frontal bone. The vibration is then transmitted inwards through the fluid medium of cerebrospinal fluid (CSF). The vibration along with little temperature may activate the functions of thalamus and the basal forebrain which then brings the amount of serotonin and catecholamine to the normal stage inducing the sleep. Pressure has an effect on impulse conduction through tactile and thermo receptors. If prolonged pressure is applied to nerve impulse conduction is interrupted and part of the body may go to the rest. In *Shirodhara* therapy, prolonged and continuous pressure due to pouring of the medicated liquid may causes tranquillity of mind and allows our mind and nervous system to experience a deep state of mental rest. The feeling is almost similar to that of meditation. As per Ayurveda, *Shirodhara* therapy is beneficial for *Pitta* and *Vata Doshas*.

Another liquid that is used is buttermilk. This is performed when there is hindrance to *Vata* passage, which has to be removed. The process is known as *Takradhara*.

### Preventive measures

- Identify the triggers of migraine.
- Natural urges are not to be suppressed.
- Day sleep is to be avoided
- Night awakening is also contraindicated
- Exposure to sun, smoke, snow, dew should be restricted

### CONCLUSION

The most common form of vascular headache is migraine. It leads to destruction of sensory organs. In

Modern science, no satisfactory treatment is available for migraine; new approaches are needed to treat the migraine. Ayurveda can play significant role in the management of migraine. Ayurveda has numerous effective remedies for migraine. In migraine according to Ayurveda when too much heat builds up in the blood vessels, they can dilate and create pressure on the nervous system. Ayurveda opens new door for treatment of migraine through holistic approaches. According to Ayurveda, first line of treatment i.e. *Nidana Parivajana*. Changes in lifestyle, diet, exercise and are important than drug. Ayurveda believes in cleansing the body and pacifying the *Doshas* from the roots by using different modalities such as nutrition, lifestyle modifications, herbs, *Panchakarma*, *Kriyakalpa*, *Yoga*, *Pranayam*, meditation relaxation techniques, and *Marma* therapy to treat migraine. These treatment approaches create a balanced physiology which brings healing the body and mind. This helps to achieve complete treatment as well as control of migraine through Ayurveda.

### REFERENCES

1. Steiner TJ, Stovner LJ, Vos T. GBD 2015: migraine is the third cause of disability in under 50s. *J Headache Pain*. 2016;17(1):104. doi:10.1186/s10194-016-0699-5 doi: 10.1186/s10194-016-0699-5
2. International Headache Society (IHS) [internet] [updated 2019; cited 2019 july 26].Available from: <https://ichd-3.org/1-migraine/1-1-migraine-without-aura/>
3. Facts and figures - The Migraine Trust [internet] [updated 2019; cited 2019 july 26].Available from: <https://www.migrainetrust.org/about-migraine/migraine-what-is-it/facts-figures/>
4. International Headache Society (IHS) [internet] [updated 2019; cited 2019 july 26].Available from: <https://ichd-3.org/1-migraine/1-1-migraine-without-aura/>
5. Kushwaha HS. Charak Samhita, Chaukhamba Orientalia, Varanasi, 2016, Siddhishthana 9/79; pg.1072
6. Kumari A. Tewari, P Yogratnakar -66/54, Chaukhamba Visvabharati, Varanasi, 2010

7. Sitaram B. Bhavaprakasa Of Bhavamisra, Chaukhamba Orientalia Varanasi, 2014; 62/23 pg.157
8. Shrivastav S. Sharangadhar Samhita, Chaukhamba Orientelia, Varanasi 2013, Madhyam Kanda 9/145-148; pg.157
9. Sitaram B. Bhavaprakasa Of Bhavamisra, Chaukhamba Orientalia Varanasi, 2014; 62/46 pg.603

**How to cite this article:** Komal Bisht, Sheweta Kotwal, Vandana Vidyarthi, Daya Shankar Singh, Preeti Pahwa. An Ayurvedic approach in the management of Migraine : A Review Study. *J Ayurveda Integr Med Sci* 2019;4:241-246.

**Source of Support:** Nil, **Conflict of Interest:** None declared.

\*\*\*\*\*

**Copyright** © 2019 The Author(s); Published by Maharshi Charaka Ayurveda Organization, Vijayapur (Regd). This is an open-access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.