

AN AYURVEDIC MANAGEMENT OF *ARDHAVABHEDAKA* (MIGRAINE) – A REVIEW ARTICLE

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ABSTRACT

Rapid urbanisation has altered people's lifestyles in the modern period. Stress is creating an increase in the frequency of acute and chronic diseases as a result of shifting work expectations for a better lifestyle. Migraine is a chronic ailment that affects a large percentage of the population, with varied degrees of severity. It is a chronic neurological illness marked by recurrent moderate to severe headaches, which are frequently accompanied by a variety of autonomic nervous system symptoms that interfere with daily activities. Migraines are characterised by a sensory disturbance that is followed by a strong headache on one side of the head. They mostly affect people between the ages of 15 and 55. *Acharyas* describe numerous types of *Shiro Rogas* (head ailments) in *Ayurvedic* scriptures. *Ardhavabhedaka's* clinical symptoms are very similar to those of Migraine. In the case of

migraine, analgesics are typically provided, which can have adverse effects on other organs. As a result, an *Ayurvedic* approach to this condition is addressed in this article.

KEYWORDS: *Shiro Rogas, Ardhavabhedaka, Shirovirechan.*

INTRODUCTION

Ardhavabhedaka is described as *Vataja* or *Vatakaphaja*^[1] by almost all *Acharyas* but *Tridoshaj Shiroroga*^[2] by *Acharya Sushruta*. In *Ardhavabhedaka* there is cutting and churning pain in half of the region of head, cervical region, eyebrows, temporal part, ears, eyes, and frontal head which is very much similar to Migraine. Typically the headache is unilateral (Affecting one half of the head) varied in intensity, frequency and duration, lasting from 2 to 72 hours commonly accompanied by nausea and vomiting. Some are associated with sensory, motor and mood disturbances.^[3]

Fast facts on migraine^[32]

Some people who experience migraines can clearly identify triggers or factors that cause the headaches, such as allergies, light, and stress.

Some people get a warning symptom before the start of the migraine headache.

Many people with migraine can prevent a full-blown attack by recognizing and acting upon the warning signs.

Over-the-counter (OTC) medications can eliminate or reduce pain, and specific medications can help some people with migraine.

People who have severe attacks can take preventive medicines.

Nidana (Aetiology) of Ardhavabhedaka

Migraine is more common in women than men and occurs most commonly in the second and third decade of life. The cause of migraine is unknown. However, it is believed to be related to a mix of environmental and genetic factors. It runs in families in about two-thirds of cases and rarely occurs due to a single gene defect suggesting that migraine sufferers may inherit sensitivity to trigger factors that produce inflammation in the blood vessels and nerve around the brain causing pain.

In Ayurveda, *Acharyas* have described the specific causes which can be classified into following groups for convenience.^[3,4,5,6]

1. *Aaharaja Nidana (Dietary causes)*

- ✓ Excessive intake of *Ruksha Bhojana* (Dry and Coarse food)
- ✓ *Adhyashana* (Excessive intake of meal or eating during indigestion)

- ✓ Skipping meals/Fasting/Hunger
- ✓ *Atiambupana* (Excessive intake of water)
- ✓ *Atimadyapana* (Excessive intake of alcohol).

2. *Viharaja Nidana* (Habitual and Occupational causes)

- ✓ Affliction with *Pragavata* (Easterly wind)
- ✓ Due to excessive exposure to frost
- ✓ Weather changes, High altitude, Barometric pressure changes
- ✓ Suppression of the natural urges specially of *Mutravega*, *Purishavega*, *Kshavathuvega* and *Nidravega*.
- ✓ *Ayasa* (Excessive exercise or fatigue)
- ✓ Changes in sleep patterns as *Diva Swapna* (Day sleeping) after taking meal or *Ratrijagarana* (Overnight awakening)
- ✓ *Atimaithuna* (Excessive coitus)
- ✓ *Atibhashya* (Over talking)
- ✓ Excessive Exposure to Sun rays or bright light
- ✓ *Asatmyagandha* (Bad odour)
- ✓ Staying in unhygienic conditions.
- ✓ Hormonal (Menstrual cycle fluctuations, oral contraceptives pills etc.)

3. *Mansika Nidana*

- ✓ When psychological stress is involved the migraine attack occurs often.

4. *Shiroabhighata*

- ✓ Mild associated head injury e. g. heading a football is a precipitating factor.

Triggers of migraine^[32]

1. The cause of migraines is not yet known. It is suspected that they result from abnormal activity in the brain. This can affect the way nerves communicate as well as the chemicals and blood vessels in the brain.
2. Genetics may make someone more sensitive to the triggers that can cause migraines. However, the following triggers are likely to set off migraines
3. **Hormonal changes:** Women may experience migraine symptoms during menstruation, due to changing hormone levels.

4. **Emotional triggers:** Stress, depression, anxiety, excitement, and shock can trigger a migraine.
5. **Physical causes:** Tiredness and insufficient sleep, shoulder or neck tension, poor posture, and physical overexertion have all been linked to migraines.
6. Low blood sugar and jet lag can also act as triggers.
7. **Triggers in the diet:** Alcohol and caffeine can contribute to triggering migraines.
8. Some specific foods can also have this effect, including chocolate, cheese, citrus fruits, and foods containing the additive tyramine.
9. Irregular mealtimes and dehydration have also been named as potential triggers.
10. **Medications:** Some sleeping pills, hormone replacement therapy (HRT) medications, and the combined contraceptive pill have all been named as possible triggers.
11. **Triggers in the environment:** Flickering screens, strong smells, second-hand smoke, and loud noises can set off a migraine. Stuffy rooms, temperature changes, and bright lights are also possible triggers.

Rupa (Signs and Symptoms) of Ardhavabhedaka

Rupa is indicative of the prognosis of the disease.

Rupa of *Ardhavabhedaka* can be grouped into following two categories.

1. *Pratyatma Linga of Ardhavabhedaka (Cardinal symptoms)*

In *Ardhavabhedaka Roga*, all the *Acharyas* have described one thing common i. e. *Vedana* (pain) in *Ardheshirsha* (half of the region of head). So the *Pratyatma Linga* of *Ardhavabhedaka* must be "Pain in the half of the region of head."^[7]

2. *Samanya Lakshana of Ardhavabhedaka (General Symptoms)*

According to different *Acharyas* following are *Lakshanas*

- Cutting and churning pain in half of the region of *Manya* (cervical region) *Bhru* (Eye brows), *Shankha* (Temporal region), *Karna* (Ears), *Akshi* (Eyes) and *Lalata* (Frontal head).^[8]
- Tearing and throbbing intensity of pain with *Bhrama* (Vertigo/confusion).^[2]
- The disease develops either at the interval of fortnight (15 days) or 10 days or a month and subsides of its own accord.^[9]
- *Shankhamoola Darana* (Tearing pain in temporal regions), *Gandashotha* (Swelling over Zygomatic area) and *Chakshu-Virajyata* (Redness of Eyes).^[10]
- *Ardhashirsha Vikara* is elevated with the rise of Sun.^[11]

- If the disease lasts for advanced, it may destroy the sight and the hearing.^[8,9]

Symptoms of migraine^[32]

- Migraine symptoms can vary greatly from person to person. The severity of migraine symptoms can also vary tremendously.
- Head pain, which is typically throbbing in nature and occurs on one side of the head, is the most common migraine symptom.
- A majority of people with migraine will also experience nausea, sensitivity to light, and sensitivity to sound.
- Many people experience visual disturbances, dizziness, fatigue, numbness or tingling during their attacks.
- Some symptoms can seem unrelated to migraines, so keeping a journal can help identify migraine-related symptoms.
- Migraines often progress through four stages, with symptoms varying from stage to stage.
- Possible symptoms during prodrome include aphasia (difficulty speaking), constipation or diarrhea, difficulty concentrating, fatigue, hyperactivity, food cravings, increased urination, mood changes, and neck pain. You can read this article on migraine prodrome for more information.
- The aura phase of migraine can include a variety of symptoms including allodynia (hypersensitivity to touch/feel), aphasia (difficulty with language), auditory or olfactory hallucinations (hearing or smelling things that are not there), one-sided paralysis, dizziness, vertigo, and parasthesia.
- Learn more about migraine aura here: the migraine aura phase & migraine aura symptoms.
- People are usually most familiar with the headache phase of migraine. Head pain during a migraine attack is frequently unilateral, meaning it occurs on one side of the head. Pain is typically pulsating or throbbing in nature, made worse by physical activity, and lasts for four or more hours.
- Other symptoms can also accompany the headache phase of migraine. Postdrome, the last phase of migraine, can lead to feeling “hungover” including symptoms such as fatigue, changes in mood, and inability to concentration.

According to modern science also migraine typically present with self-limited, recurrent severe headache associated with autonomic symptoms. About 15-30% of people with

migraine experience migraine with an aura and those who have migraine with aura also frequently have migraine without aura. The severity of the pain, duration of the headache, and frequency of attacks is variable.^[3,6]

Types of migraine^[32]

There are two main types of migraine. This classification depends on whether the individual experiences any disturbances of the senses leading up to a migraine. These are known as auras.

Migraine with aura

For many people with migraine, the auras act as a warning, telling them that a headache is soon to come.

The effects of an aura can include

- Confusing thoughts or experiences the perception of strange, sparkling or flashing lights
- Zig-zagging lines in the visual field blind spots or blank patches in the vision.
- Pins and needles in an arm or leg.
- Difficulty speaking
- Stiffness in the shoulders, neck, or limbs
- Unpleasant smells If the following symptoms are unusual for the person with migraine, they should not be ignored
- An unusually severe headache visual disturbance.
- Loss of sensation.
- Difficulties with speech When migraines with aura affect vision, the patient may see things that are not there, such as transparent strings of objects.
- They may also not see parts of the object in front of them or even feel as if part of their field of vision appears, disappears, and then comes back again. People experiencing an aura may describe the visual disturbance as similar to the sensation that follows being exposed to a very bright camera flash.

Migraine without aura

More commonly, a person will experience a migraine without any sensory disturbance leading up to the attack. Between 70 and 90 percent of migraines occur without an aura.

Other types

There are other types of migraine related to specific syndromes or triggers, including:

1. **Chronic migraine:** This refers to any migraine that triggers attacks on over 15 days of the month.
2. **Menstrual migraine:** This is when the attacks occur in a pattern connected to the menstrual cycle.
3. **Hemiplegic migraine:** This causes weakness on one side of the body for a temporary period.
4. **Abdominal migraine:** This is a syndrome that connects migraine attacks to irregular function in the gut and abdomen. It mainly occurs in children under 14 years of age,
5. **Migraine with brainstem aura:** This is a rare type of migraine that can trigger severe neurological symptoms, such as affected speech. Speak to a doctor after identifying a migraine pattern in any headaches experienced. They will be able to advise the type and prescribe suitable treatment.

Diagnoses of migraine^[32]

Doctors have a range of criteria and tests for diagnosing migraine.

Migraine diagnosis typically centres around a description of the different migraine symptoms, how long they occur and how long they last. This will help your migraine specialist determine what tests are necessary to rule out other causes for your symptoms.

Some tests that can be conducted include MRIs, Magnetic resonance imaging, CT/Cat SCANS, Computed Tomography, Blood Chemistry and Urine analysis, Sinus X-Ray, EEG, Eye Exam, Spinal Tap or lumbar puncture.

Management as per *ayurvedic* principles

The *Ayurvedic* line of management of *Ardhavabhedaka* can be classified in following groups.

A. *Nidana parivarjana* (Avoidance of causative factors)

Nidana Parivarjana is the first and most useful method in the prevention and management of *Ardhavabhedaka*. The factors which are known to produce *Ardhavabhedaka* should be avoided.

B. *Aushadh chikitsa*

In this both *Panchkarma Chikitsa* and oral medication in form of *Shamana Chikitsa* is indicated. Under *Panchkarma* some *Shodhana Karmas* (For radical removal of causative

morbid factors of the disease from the body) and some other procedures (For instant relief by using specialized techniques) are indicated.

These include

1. Panchkarma procedures

Shirovirechana Karma (Nasya procedure)

In the *Nasya Karma* therapy the drug is administered through nostrils. Medicines used for this purpose include oils, prepared with drugs in the form of powder juice or paste of the drugs which may have irritant effect on nasal mucosa.

Nasyakarma can be done for 7-21 days according to severity and chronicity of the disease.

Preparations used in *Shirovirechana Karma* are:

Taila/Ghrita - *Shadabindu Taila, Anu Taila, Dashmoola Taila, Gunja Taila, Goghrita, Devadarvadi Ghrita, Lakshadi Taila, Kumkumadi Ghrita, Kusthadi Ghrita* mixed with *Sharkara*.^[12,13]

Juice/Kalka - *Shirishadya Avapeeda, Danshamooladya Avapeeda, Madhukadya Avapeeda*.^[14]

Others single drugs used for Nasya

Madanphala mixed with *Mishri* and cow's milk should used before sun rise.^[15]

Powder of fruit and root of *Shweta Aprajita* mixed with water.^[16]

Vidanga powder and black *Tila* paste mixed with water and extracted *Rasa* (lukewarm).^[17]

Basti Karma (Medicated enema)^[18]

In *Ardhavabhedaka, Niruha Basti* prepared with *Vatanashaka* drugs should be given first, followed by *Anuvasana Basti* prepared of *Ghrita, Taila* etc.

Upnaha (Poultice)^[18]

Poultice of *Vatanashaka* drugs like *Dashamoola*, cotton seeds, mustard seeds etc. mixed with hot milk (wrapped in a cloth in the paste form) can be bandaged around the head.^[19]

Shiro-Basti^[18]

In *Shiro Basti*, a cranial pouch or cuff around the head is prepared and medicated oil is filled into this pouch for about 1 *Muhurta* (48 minutes).

In *Ardhavabhedaka Vata* or *Vatakaphanashaka* medicated oils like *Dashmoola Taila* and four types of *Sneha* viz. *Ghrita*, *Taila Vasa*, *Majja* etc. are used.

Dahana Karma (Cautrization)^[18]

Dahana Karma is indicated in last when the pharmacological approaches are not responded in *Ardhavabhedaka*.

According to *Acharya Charaka*, *Dahana Karma* should be applied at *Shankha* and *Lalata Pradesha*, limited to dermal layer (*Twaka Daha*) with the help of *Sharkandagra* or *Godanta*. *Acharya Bhela* has prescribed *Pippali* for *Dahana Karma*.^[20]

2. *Shamana Chikitsa (Pacificatory therapy)*

It is curative treatment. The drugs used in the treatment of *Ardhavabhedaka* are:

Rasa Aushadhi - *Chandrakanta Rasa*, *Shirovajra Rasa*, *Mahalaxmi Vilasa Rasa*^[21]

Kwatha (Decoction)- *Pathyadi Kwatha*,^[22] *Dashmoola Kwatha*, *Dhatryadi Kwatha*

Ghritapana- *Mahamayura Ghrita*, *Mayuradya Ghrita*^[23]

Shirolepa (Head mask) - *Kumkuma Ghrita lepa*,^[13] *Sarivadi lepa*.^[24]

Other drugs for *Shirolepa* are

- i. Process black pepper powder with *Bhringraja Swarasa* & keep it in a bottle after drying. Use with *Bhringraja Swarasa* during attack.^[25]
- ii. Black *Tila*, *Jatamansi* powder mixed with *Saindhava* and honey.^[26]

Shiro-Abhyanga (Massage over head)- With *dashmoola taila*, *Mahamayura ghrita*, *Prapondrikadi taila*.^[27]

Specific drug- *Shudh Somal* in very less quantity is effective but it should be used only when attack is suppressed. It is not indicated during migraine attack.^[28]

Yoga- Since stress is an important factor in creating both migraine and tension headaches, yoga can without doubt help in preventing these types of headaches. Yoga can also help with tension in the muscles of the neck, back and head which contribute to headaches. Yoga helps to release tight muscles and improve blood circulation in that region. Yoga helps relax the mind as well.

Rodney Yee recommends a sequence of Practices and Instructions as follows: Legs-up-the-wall pose (*Viparita karani*) for five minutes or longer, supported cobbler's pose, half plow pose (*Ardha Halasana*), one-legged forward bend (*Janu Sirasasana*) with head support, seated forward bend (*Paschimottanasana*) with head support.

Pranayama (Breathing exercises): Different types of breathing exercises have different effects on the body, mind and spirit. Breathing practices purify nadis (subtle channels that carry *Prana* through the field of mind).

- If the headache is due to *Vata* vitiation, one can benefit from alternate nostril breathing (*Anuloma Viloma*).
- If the headache is due to *Pitta* vitiation, doing lunar and *Sheetali Pranayama* can help.
- If due to *Kapha Dosha* vitiation, solar and *Kapalabhati Pranayama* can be beneficial.

Other Aushadha Yoga

1. *Saptamrita Lauha Guggulu*,
2. *Shirahshula Vajra Rasa*,
3. *Saraswataristha*,
4. *Aarogya Vardhani Vati*

Prevention

Preventive treatment of migraine include: Medications, nutritional supplements and lifestyle alterations. The goal for preventive treatment is to reduce the frequency, pain, duration of migraines, and to increase the effectiveness of therapy. Another reason is to avoid overuse of medication. This is a common problem and can result in chronic daily headache.

Do's

Aahara

- ✓ Oily substances- *Purana Ghrita*, *Chatuhsneha* (*Ghrita*, *Taila*, *Vasa*, *Majja*) in *Uttama Matra*
- ✓ *Dhanya* - *Shalidhanya*, *Shathi dhanya*, *Yusha*
- ✓ Vegetables - *Patola*, *Shigru*, *Draksha*, *Vastuka*, *Karvellaka*, *Amra*, *Dhatri*
- ✓ Fruits - *Dadima*, *Matulunga*
- ✓ Liquids - *Takra*, *Kanjika*, coconut water
- ✓ Drugs - *Haritaki*, *Kustha*, *Bhringraja*, *Kumari*, *Musta*, *Ushir*, *Chandrika*, *Gandhasara*

- ✓ Treatment- *Shiroabhyanga, Nasya, Dhoomapana, Virechana, Shirolepa, Shirobasti, Upnaha, Raktamokshana, Agnikarma*

Vihara

- ✓ Practice good sleep habits
- ✓ Exercise daily, and another relaxation technique
- ✓ Do *Yoga, Pranayama (Anuloma - Viloma), Shavasana*
- ✓ Loose excess weight

Dont's

Aahara

- ✓ *Ruksha bhojana, Atimadyapana, Viruddhabhojana* etc.
- ✓ Do not overuse pain medicine

Vihara

- ✓ *Vegadharana, Atijalakrida, vriddhuajalakrida, Atimaithuna, Divaswapana, Ratrijagrana, Atibhasya, Adhyasana, Pragvata and Avashyaya sevana, Manastapa and Ativyayama* etc

CONCLUSION

Migraine is a debilitating condition. To deal with repeated headaches, migraineurs are frequently offered numerous preventive and acute treatment drugs. Migraine sufferers are looking for nonpharmacologic (alternative) treatments to relieve their symptoms. Medication overuse headache can occur as a result of the regular use of medications in this illness, causing headaches to become more severe and frequent. As a result, in the case of migraine, *Ayurvedic* treatment should be recommended, as it not only reduces symptoms but also prevents subsequent negative effects. *Ayurveda*, the ancient Indian medicinal system, brings up new avenues for the treatment of migraines and other types of headaches. *Ayurvedic* treatments are holistic therapies that are personalised to the individual, as everyone is a unique combination of five elements and three life source energies, according to *Ayurvedic* medicine (*Vata, Pitta, Kapha*). To cure migraine headaches, *Ayurveda* employs a variety of therapies, including nutrition, lifestyle changes, herbs, *Panchakarma, Yoga*, meditation, relaxation techniques, *Pranayama* (breathing exercises), aromatherapy, *Marma* points, colour therapy and gem therapy. These therapeutic methods help to maintain a healthy physiology. This state of total equilibrium in the healing of the body and mind might help the sickness to resolve and the symptoms to go.

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