Role of Ayurveda in the Management of *Ardhav bhedak* W.S.R to Migraine – A Review

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**ABSTRACT**

**Background:** The most frequent neurological condition for which patients seek medical care is headache, which globally causes more disability than any other neurological condition. Migraine, commonly referred to as “Hemicrania,” which means “half of the head,” is the second most frequent primary headache. Vomiting, nausea, and sensitivity to scent, light, or sound are all associated symptoms. Although it is not a fatal condition, it can seriously disrupt the patient’s life, necessitating greater care and attention throughout therapy. Unfortunately, only symptomatic drugs, many of which have significant side effects and can lead to dependence, have been stabilized for migraine prevention to date.

**Materials and Methods:** The information employed in the current analysis came from both primary and secondary sources, specifically literature studies of important ayurvedic scriptures and Samhitas as well as frequently read research articles.

**Results:** Some medication that is mentioned in the ayurvedic classics has been gathered to treat this disease.

**Discussion:** In Ayurvedic texts there are several types of Shiro Rogas (head disorders) described by Acharyas. Among them the clinical features of *Ardhavabheda* are very much similar to Migraine. This review demonstrates how effective ayurveda is in treating migraines without a lot of negative effects.

1. **INTRODUCTION**

One of the *Urdhvacatruggata rogas* that has been scientifically linked to migraine is *Ardhavabheda*, which is referenced in ancient Ayurvedic texts. One of its signs is a unilateral, half-sided headache with accompanying vertigo, nausea, photophobia, and phonophobia complaints. The most sensitive migraine diagnostic criteria include a headache that becomes worse with exercise, stress, and fatigue.[1] According to the vascular hypothesis of the brain, activation and sensitization of the central trigeminal system are thought to result from the desensitization of peripheral perivascular nerve terminals as well as possible consequences of dilated meningeal blood vessels.[2] About 16–20% of the population in India has migraine cases that have been documented.[3] The World Health Organization lists migraine as one of the disorders whose specific cause is unknown and further claims that it is one of the most incapacitating medical conditions in the world. It typically happens during the second and fifth decades of life, at the prime stage of life and is 3 times more common in women than in males.[5] This typically has a detrimental impact on social and professional activity. According to modern medicine, there is no adequate standardized course of treatment for the management of migraine. As a result, acute migraine symptoms are typically treated with over-the-counter drugs; however, chronic illnesses are typically more common and challenging to cure. As a result, medication and non-pharmacological therapeutic methods are used. Among the non-pharmacological techniques include the recognition of triggers, mindfulness meditation, relaxation exercises, and psychotherapy. The most often utilized medications in the pharmacotherapy technique include aspirin, paracetamol, ibuprofen, and diclofenac.[3] As the *Shira* (head), also known as the *Uttamanga* (superlative organ), is regarded as the primary seat of knowledge and the controller of the entire body, it is specifically mentioned in Ayurvedic writings on *Urdhvacatruggata roga* and how to treat them.[6] One of the 11 varieties of *Shiroroga* described by Acharya Sushruta is *Ardhavabheda*.
(migraine), which manifests as a paroxysmal unilateral headache accompanied by dizziness and pain of varied intensities. The diet, current lifestyle, inconsistent eating patterns, fermented, pickled foods, baked goods, chocolates, dairy products, and variations in sleep patterns, such as waking up at night for nighttime tasks and resting during the day, are risk factors for Ardhavbhedaka. Stress and strain are also predisposing factors, which are crucial additional considerations. In along with Pancha karma, Sarvanga abhyanga, Swedana, Nasya karma, and Shamana chikitsa, Ayurveda provides a number of different treatments.

1.1. Aims and Objectives
Reviewing a conceptual study on the disease Ardhavbhedaka W.S.R. to migraine is the aim of the present study.

2. MATERIALS AND METHODS
Material related to mental health and Ardhavbhedaka (migraine) is collected from Ayurvedic text and text book of modern medicine, respectively. The index, non-index medical journals have also referred to collect information of relevant topic.

3. REVIEW OF LITERATURE
3.1. Definition of Ardhavbhedaka
Acharya Sushruta said that after a fortnight or 10 days, if one side of the head suddenly begins to experience acute tearing and pricking pain, giddiness, and piercing pain. This needs to be identified as Ardhavbhedaka, which all three doshas contributed to. Acharya Vagbhatta defined Ardhavbhedaka as a headache on one side of the head. Painful episodes occur every 15 days or 1 month, and they go away on their own. The condition may potentially affect how well the eye and ear work if it worsens.

3.2. Migraine
Recurrent attacks of moderate-to-severe throbbing and pulsing pain on one side of the head are the hallmark of the headache type known as a migraine. The three layers of membranes that surround and protect the brain and spinal cord, known as the meninges, contain nerve fibers that are activated by blood arteries in the brain. Even though there are no specific Purvarupas for Ardhavbhedaka mentioned in the Ayurvedic classics, there is a reference to Purvarupas of Shiroroga in Vaidya Vinod, which states that Shiroroga that is Kapha dominant may have restricted head movements, such as extension and flexion, as well as heaviness in the head.

3.3. Nidana of Ardhavbhedaka
The “Kiyantah shirasiyadhyaya” of Sutrasthana contains an etiology of Shirorogas that was mentioned by Acharya Charaka. Sandharana (Suppression of natural urges specially of Mutravega, Purishavega, Kshavathvega and Nidravega), Divasawapana (day sleeping), Ratrigranama (overnight awakening), Mada (Alcohol intake), Uccha bhashana (excessive talk), Avashyaya (due to excessive exposure to fog), Prayagata (Exposure to eastern winds), Atimaithuna (Excessive sexual indulgence), Asatmya gandha (Bad odor), Raja, Dhuma, Hima and Atapa (Excessive exposure to dust, smoke, cold weather, and sun rays), Guru Ahara, AmlaAhara, and Harita Dravya (Excessive intake of heavy, sour food and rhizomes etc. These etiological variables cause the Vatadi doshas to become more severe, which vitiates Rakta Dhatu in the Shirah and causes Shir roga to appear.

Acharya Vagbhata and Yogaratnakara, the causes of Shirorogas include Unsveda (excessive sudation), Krimi (worms), Upadhana dvesa (avoidance of pillows), Abhyanga dvesa (aversion to massages), and Prateteshana (continuous seeing).

3.4. Purvarupa of Ardhavbhedaka
Even though there are no specific Purvarupas for Ardhavbhedaka mentioned in the Ayurvedic classics, there is a reference to Purvarupas of Shiroroga in Vaidya Vinod, which states that Shiroroga that is Kapha dominant may have restricted head movements, such as extension and flexion, as well as heaviness in the head.

3.5. Rupa of Ardhavbhedaka
- The symptoms of Ardhavbhedaka, according to Acharya Charaka, include intense discomfort on one side of the head, especially in the neck, eyebrows, temporal region, ear, eye, and forehead. It hurts like being cut by something sharp or being pierced by something in nature.
- Acharya Sushruta described a severe tearing and piercing pain in one side of the brain that was accompanied by giddiness. These characteristics can show up every 10 days, every 2 weeks, or at any moment.

3.6. Symptoms of Migraine
3.6.1. Prodrome
For roughly 60% of migraine sufferers, the following symptoms appear hours or days before a headache:
- Being sensitive to light, sound, or smell
- Fatigue
- Food cravings or lack of appetite
- Mood changes
- Severe thirst
- Bloating
- Constipation or diarrhea.

3.6.2. Aura
Neurological system is the source of these symptoms, which frequently affect your vision. They often begin gradually, last between 5 and 20 min, and are shorter than an hour.
- See black dots, wavy lines, flashes of light, or things that are not there (hallucinations)
- Have tunnel vision
- Not be able to see at all
- Have tingling or numbness on one side of your body
- Not be able to speak clearly
- Have a heavy feeling in your arms and legs
- Have ringing in your ears
- Notice changes in smell, taste, or touch.

3.6.3. Attack
A migraine headache frequently starts off as a throbbing sensation before becoming dull. Usually, it gets worse as you exercise. The pain may be in the front of your head, travel from one side of your head to the other, or feel as though it is affecting your entire head. A headache and nausea are experienced by roughly 80% of persons, and about half of them vomit. The average duration of a migraine attack is 4 h, although more severe cases can continue up to 3 days. Two to four headaches per month are typical. While some people only experience migraines once or twice a year, others may experience them frequently.
3.6.4. Postdrome
After a headache, this phase can linger for up to a day. The symptoms include:
- Feeling tired, wiped out, or cranky
- Feeling unusually refreshed or happy
- Muscle pain or weakness
- Food cravings or lack of appetite.

4. MANAGEMENT OF ARDHAVBHEDAKA

4.1. General Management of Shirooroga
The following preventive steps should be performed for all types of headaches:
- **Nidana parivarjana:** The etiological causes that cause headaches should be avoided from a therapy perspective. Rest stay away from Veggavarodha, manage your thoughts, etc. In addition, stay away from other Aharaja and Viharaja Hetus.[18]
- **Samshodhana chikitsa:** In all of the Urdhavajatragata rogas, N. karma has been recommended as the primary form of treatment.[19]
- **Samshamana chikitsa:** According to “Samanya Vishesh Sidhanta” and the predominance of the exhibiting Dosha, the vitiated Doshas should be returned to their natural state with the aid of Nidana parivarjana as well as medication.[20]

4.2. Some Ayurveda Medicines use in Ardhavbhedaka

4.2.1. Single medicine
- **Bala** – Headaches that start in the temples and spread to the center of the head respond well to bala treatment. This happens as a result of pitta dosha-related imbalances in the stomach and intestines, which include indigestion, heartburn, hyperacidity, and rage or irritation.[21]
- **Guduchi** – Due to its general tonic, anti-spasmodic, anti-inflammatory, anti-arthritic, hepatoprotective, anti-allergic, and anti-diabetic characteristics, guduchi is frequently employed in ayurvedic medicine to strengthen the immune system and increase the body’s resistance to infections. Due to its ability to treat a variety of illnesses, it is also known as the miracle herb.[22]
- **Nimba** – Due to its Ama pachana and Pitta hara properties, Nimba (Azadirachta indica) is beneficial for headaches.[23]
- **Dhamasa** – The anti-microbial and analgesic properties of the ethanol and aqueous extracts of Fagonia indica leaves are assessed by Sharma et al. Fagonia indica leaf extracts (25, 50, and 100 mg/mL) were examined for their antimicrobial properties using Gram-negative and Gram-positive bacterial strains and the zone of inhibition. *Escherichia coli* (ATCC 25922), *Staphylococcus aureus* (ATCC 29213), *Pseudomonas aeruginosa* (ATCC 27853), and *Bacillus cereus* (ATCC 6633) were the microbes employed in this investigation. Rats were used in the tail flick method to examine the analgesic efficacy of different solvent extracts (200 and 400 mg/kg) of Fagonia indica. Regression analysis was used to statistically analyse the results. The analysis revealed that the ethanol extract significantly inhibited all bacterial strains, but that it had the greatest inhibitory effect on *Bacillus cereus* and the least against *Pseudomonas aeruginosa*. Both extracts (ethanol and water) demonstrated considerable ($P = 0.05$) analgesic effectiveness in the analgesic activity.[24]

4.2.2. Compound medicine
- **Sitopaladi churn** – The acid-alkali balance may have been restored by *Sitopaladi churna’s* controlled lifestyle and food, which also may have strengthened or repaired the digestive system’s functionality. The frequency of migraines may have decreased due to an improved acid-alkali balance in the body.[25]
- **Pravala pisthi** – According to Ayurveda, migraines are brought on by elevated Pitta and Vata. Pravala pisti can help balance these two doshas extremely effectively. In addition, it helps to lessen the nausea and vertigo associated with migraines.[26]
- **Saptamrit lauha** – The combined impact of Triphala and Mulethi in Saptamrit lauha is Tridosh shaman, which corrects the Doshik imbalance.
- **Bala tail- N. karma** with Bala Tail was injected into both nostrils with the expectation that its special mode of action through Sringatakamarma would strengthen the essential functioning of the sense organs. The unique Kriyakalpa treatment known as Shaniya khavaigunya (location of sickness) helps to open the Vatavahsrutis and lighten the head.
- **Til tail** - The body is relaxed and the gases that cause head pressure are eliminated by sesame oil. The nostrils, the temples, or steam inhalation are all possible applications for these oils. A popular alternative treatment for those in pain is acupressure.

5. DISCUSSION
Nearly every Acharya in Shiro-rogas mentions Ardhavabhedaka. In the Uttar Tantra, Acharaya Sushruta lists 11 different forms of Shiro-rogas. One of these, called Ardhavabhedaka, is characterized by paroxysmal unilateral headaches, vertigo, and pain of variable intensities. Due to its defining characteristic, a “half-sided headache,” Ardhavabhedaka can be scientifically associated with migraine. Maximum Nidanas demonstrate Vata-dosha’s predominance. Vata is triggered by an addiction to dry goods, an excessive diet, or overeating. The power of digestion determines how much food should be consumed. Even a mild food item, if consumed in excess, can cause Agravandhy and Amarasa development, which clogs the channels and exacerbates the three Doshas. Another factor is exposure to eastern wind, which causes headaches by narrowing the blood vessels due to Vata’s Sheeta Guna. Similar to this, suppressing natural desires prevents Vata from moving freely. Inversely, excessive sexual enjoyment causes Dhatus degeneration. In addition, many varieties of pain, such as Toda and Bheda, point to the “Vishama” nature of the Vata dosha. Maximum Nidanas demonstrate Vatadosha’s dominance. Vata is triggered by an addiction to dry goods, an excessive diet, or overeating. The first and most effective treatment for preventing and treating Ardhavabhedaka is Nidana parivarjana. Regular analgesic use for migraine headaches may cause unwanted side effects, such as gastrointestinal irritation and other problems, which could make the migraines worse and more frequent. Since ayurvedic medicine not only relieves symptoms, but also prevents them from returning and getting worse, it should be used to treat migraines.

6. CONCLUSION
For the Sharira and Manas doshas, Ardhavabhedaka required Shamana Chikitsa. Ardhavabhedaka can be successfully treated with ayurveda. Disease recurrence can be avoided or have its effects reduced.

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