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ROLE OF AYURVEDIC INTERVENTION IN THE MANAGEMENT OF MIGRAINE: A CASE-REPORT

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Abstract

Introduction:

Migraine is a common and debilitating neurological disorder affecting nearly 41 million adults worldwide, with a prevalence of approximately 16.6%. Women are almost three times more frequently affected than men. Characterized by recurrent unilateral headaches often triggered by psychological and physiological stressors, migraine substantially impairs quality of life. Despite advances in conventional medicine, a definitive cure remains elusive. In Ayurveda, migraine is described as *Ardhavabhedaka,* a subtype of *Shiroroga*, attributed primarily to the vitiation of *Vata* or *Vata-Kapha dosha*.

Objectives:

To evaluate the clinical effectiveness of an individualized Ayurvedic treatment protocol in a patient diagnosed with *Tridoshaja Ardhavabhedaka* (migraine)

Methodology:

A 39-year-old Indian female presented with recurrent left-sided headaches occurring every three days for the past two years, accompanied by nausea, vomiting, photophobia, and phonophobia. Ayurvedic management was planned according to *Vyadhi avastha* (disease stage) and *Dosha pradhanyata* (dosha predominance). The treatment included *Dosha-shamana*

chikitsa (dosha-pacifying therapy), *Nasya* (nasal therapy), *Shirodhara* (oil streaming over the forehead), *Nidana parivarjana* (elimination of etiological factors), and *Deepana-Pachana* (enhancing digestion and metabolism). Clinical outcomes were measured using the Migraine Disability Assessment (MIDAS) and Numerical Pain Rating (NPR) scales.

Observation:

The patient showed progressive improvement with a reduction in MIDAS score from 20 to 4 and NPR score from 8 to 2. Frequency and severity of migraine episodes were markedly reduced, and associated symptoms such as nausea, vomiting, and photophobia resolved.

Conclusion:

This case demonstrates the potential of individualized Ayurvedic management in reducing migraine severity, frequency, and disability. It underscores the importance of assessing *Dosha* and *Vyadhi avastha* in planning effective treatment and suggests that timely application of Ayurvedic interventions may serve as a safe and effective complementary approach in chronic migraine care.

Key words- *Ardhavabhedaka*, Migraine, S*hirodhara*, *Shirashoola*

Introduction

Migraine is a common primary headache disorder affecting approximately one in seven people worldwide. It is clinically characterised by recurrent unilateral, pulsatile, and throbbing headaches that often impair routine daily activities. According to the Global Burden of Disease (GBD) Study 2012, Migraine ranks as the third most prevalent disorder and the seventh leading specific cause of disability globally. It is the primary cause of Years Lived with Disability (YLD) among individuals under the age of 50, with a female-to-male prevalence ratio of approximately 3:1.(1)

A migraine is more than just a severe headache; it is a neurological disorder that can cause debilitating symptoms and significantly affect a person's quality of life. Characterized by intense, throbbing pain—usually on one side of the head-migraines can last for hours or even days and are often accompanied by symptoms like nausea, vomiting, dizziness or vertigo, mood changes (irritability, depression, or euphoria), Difficulty concentrating, fatigue and exhaustion after the attack and and heightened sensitivity to light and sound. (2) For some, visual disturbances or auras precede the onset of the headache. Not all migraines are preceded by an aura, but approximately 25% of people experience one. An aura consists of visual disturbances, such as flashing lights or zigzag lines, Blind spots or partial vision loss, Tingling or numbness in the face or limbs, or Difficulty speaking or understanding speech. Auras typically occur 20-30 minutes before the onset of a headache and last for less than an hour. (3) Considering the clinical features, Migraine can be linked to *Ardhavabhedaka*. *Ardhavbhedaka*, described under *Shiroroga* (head diseases) in Ayurveda, results from the imbalance of the *Tridosha* (*Vata*, *Pitta*, and *Kapha*). Acharya Sushruta lists 11 types of *Shiroroga* in the *Uttartantra*, and *Ardhavbhedaka* is one of them, characterized by pain on one side of the head. (4) According to Acharya Charaka, when Vata, either alone or combined with *Kapha*, is aggravated, it affects one side of the head, causing intense neuralgic pain (*Ativedana*) in areas such as the Manya (neck), *Bhru* (eyebrow), *Shankha* (temple), *Karna* (ear), *Akshi* (eye), and *Lalatardha* (one side of the forehead). In severe cases, it may even impair the functions of the *Netra* (eye) and *Karna* (ear)(5),(6) As a result, many individuals with Migraine seek relief through complementary and alternative medicine (CAM) modalities,(7) including acupuncture,(8) biofeedback,

relaxation techniques, herbal formulations, and vitamin or mineral supplementation. Emerging clinical evidence supports the efficacy of interventions such as acupuncture and Yoga(9) in mitigating the frequency and severity of migraine attacks. Despite the growing prevalence of CAM usage in migraine management, its therapeutic mechanisms and long-term effectiveness remain insufficiently elucidated and warrant further systematic investigation.

The management of *Ardhavabhedaka* (Migraine) involves an approach incorporating both *Shodhana* (bio-purificatory) and *Shamana* (palliative) therapies. Core interventions typically include *Snehana* (internal oleation), *Swedana* (sudation), *Virechana* (therapeutic purgation), 10 and *Nasya* (nasal administration of medicated substances), along with oral administration of classical herbal and herbo-mineral formulations. In cases unresponsive to these therapies, *Shirodhara* (medicated oil streaming over the forehead) may be considered as an advanced treatment modality. (11) *Shirodhara*, a gentle and non-invasive Ayurvedic therapy, has been found to provide significant relief in conditions such as insomnia, anxiety, stress, headache, and hypertension, often showing results comparable to or better than conventional approaches. (12) *Shirodhara*, derived from '*Shiro'* (head) and '*Dhara'* (flow), involves the continuous pouring of medicated oil or other liquids on the forehead for 36-72 minutes as a therapeutic procedure. (13)Further symptoms of Migraine often correlate with those of '*Amlapitta'* (state of hyperacidity) characterized by giddiness, fainting, dysgeusia, fatigue, nausea, vomiting, and headache. Hence, therapies that aid in hyperacidity and the correction of digestive fire also aid in improving migraine symptoms. (14) Effective management requires a precise evaluation of the *Dosha* predominance and the stage of the disease (*Vyadhiavastha*), along with the rational selection of therapeutics appropriate to the clinical phase.

Patient Information

A 39-year-old female patient, a housewife, visited the outpatient department (OPD) on 29th March 2024 with complaints of left-sided headache, throbbing and pulsating in nature, associated with nausea, vomiting, photophobia, and phonophobia for the past two years. The headache episodes significantly interfered with her routine household activities and productivity. The patient also reported disturbed sleep and frequent mood swings (Table 1).

She had previously consulted an allopathic physician and was prescribed a regimen comprising non-steroidal anti-inflammatory drugs (NSAIDs), antacids, and Sumatriptan. Although partial symptomatic relief was initially achieved, the headache episodes gradually increased in frequency and severity over the preceding two months, occurring 4-5 times per week with an intensity of 8/10 on the Numeric Pain Rating Scale (NPRS) and showing diminished response to the prescribed medication. In the week prior to presentation, the condition had further worsened, with headaches occurring twice daily, lasting up to 12 hours each, and reaching a severity of 10/10 on the NPRS, with complete resistance to NSAID therapy. A diagnosis of migraine had already been established previously, and she had undergone allopathic treatment for approximately one year without significant or sustained improvement.

There was no relevant past medical, surgical, or family history of similar complaints.

Clinical Findings

General Examination: Physical examination of the patient revealed no significant findings such as fever, pallor, icterus, or abnormal skin pigmentation. Vital signs were within normal limits: blood pressure 130/80 mmHg, heart rate 80 beats per minute, and respiratory rate 17 breaths per minute.

Local Examination: No palpable lymphadenopathy was noted, and both neurological and musculoskeletal examinations were unremarkable. Symptoms increased with exposure to bright light, loud sounds, stress, and with certain foods and drinks. The visual acuity of both eyes was 6/6 LogMAR (0), and IOP 19 mm of Hg in both eyes-no abnormality was detected in the ear and nose. Overall, detailed systemic and local examinations did not reveal any significant contributory findings.

The assessment tools used in the study were the Numerical Pain Rating Scale (NPR)(15) and the Migraine Disability Assessment Test (MIDAS),(16) (Table 3) which are commonly employed for evaluating pain intensity and the impact of migraines on daily functioning.

Diagnosis Assessment:

The patient was assessed to have a *Vata-Pittaja Prakriti* and identified as a *Mamsasara Purusha*. *Ashtasthana Pariksha* revealed a *Vata-Pitta* dominant *Nadi*, *Suplipta Jivha* (coated tongue), and *Madhyama Akruti* (moderate build). The remaining parameters, including *Mala* (stool), *Mutra* (urine), *Shabda* (voice), *Sparsha* (touch), and *Druk* (vision), were found to be *Prakrita* (within normal limits).

Routine haematological investigations showed no abnormality, and radiological imaging, including CT and MRI scans, was unremarkable. Assessment of Migraine Severity (Table 2)

Based on clinical features such as paroxysmal one-sided headache, associated photophobia, phonophobia, and nausea, the condition was diagnosed as a *Tridoshaja Ardhavabhedhaka* (TA), which can be correlated with Migraine disease (8A80-ICD11)

Laboratory Investigations

Hematological parameters were within normal limits, with RBC count 5.54 × 10^6/µL, WBC count 9500/cumm, PCV 45.7%, and hemoglobin 15.0 g/dL. Differential leukocyte count showed neutrophils 52%, eosinophils 4%, lymphocytes 30%, monocytes 5%, and basophils 0%, while platelet count was 3.61 lakhs/cumm. Bleeding time (3.12 min) and clotting time (5 min) were normal.

Biochemical investigations revealed normal values, including random blood glucose 90 mg/dL, serum urea 21 mg/dL, total bilirubin 1.10 mg/dL (direct 0.10 mg/dL), SGOT 39 U/L, SGPT 43 U/L, alkaline phosphatase 62 U/L, and total protein 7.7 g/dL (albumin 4.8 g/dL, globulin 2.9 g/dL; A/G ratio 1.66). Lipid profile was also within the reference range: total cholesterol 180 mg/dL, LDL 70 mg/dL, HDL 80 mg/dL, and triglycerides 140 mg/dL.

Table 1: Chronological Orders of Complaints and Events.

S.No	Complaints / Events	Duration/ Date
01.	Disturbed sleep/loss of sleep	1.5 years
02.	Headache on the left side, throbbing and pulsating in nature, associated with nausea, vomiting, sensitivity to light and sound	2 years
03.	Repeated mood swings	1.5 years
04.	Presentation for consultation	29.03.2024

***Dashvidha Pariksha* (Tenfold examination of the patient)**

The further examination revealed that the his *Prakriti* (physical attributes) was *Vata -Pittaja* (predominant *Vata* and *Pitta*), *Rakta* (blood), *Meda* (Fat), and *Asthi* (bones), which were *Saara Mamsa sara* (~compactness of tissue or organ) was *Madhyam* (~medium), *Pramana*

(~Anthropometry) was *Madhyama*, *Satamya* (~Suitability or homologation) was *Madhyama* (Medium), *Satva* (~psyche) was *Madhyama* (Medium), *Vaya* (~Age) was *Madhyamavstha* (middle age) *Aharashakti* (~capacity to intake food and to digest it) was observed as *Abhyavaharana* (~capacity to intake food) and *Jaranashakti* (~power of digestion), which was *Madhyama*.

Table 2. Assessment of migraine severity

Parameter	Score 0	Score 1	Score 2	Score 3	Score 4
Headache severity	No headache	Mild headache	Moderate headache	Severe headache	Excruciating headache
Vomiting	Nil	Occurs only if headache persists	1–2 episodes	2–3 episodes	Requires medication to stop
Nausea	Nil	Occasional	Moderate	Severe	Severe (persistent)
Associated symptoms	None	Mild (able to continue work)	Moderate (work discontinued)	Severe (work discontinued)	Excruciating (requires medication)

Note: The above gradation system was developed for the present clinical study to standardize assessment of migraine severity.

Timeline

Details of the therapeutic timeline and outcome are listed in Table No. 4.

Table 3: MIDAS SCORE The definition of various grades

Grade	Definition	Score
I	Minimal or infrequent disability	0–5
II	Mild or infrequent disability	6–10
III	Moderate disability	11–20
IV	Severe disability	21+

Therapeutic Intervention

The patient was initially managed with *Godanti Bhasma*, *Pathyadi Kwatha*, *Shatabindu Taila Nasya*, and *Avipattikar Churna*, which provided only partial relief of symptoms. In the subsequent visit, *Laghusutshekhar Rasa* and *Shirashooladivajra rasa* were introduced; however, the improvement in headache intensity was minimal. By the third follow-up, *Marsha Nasya* with *Anutaila* and *Shirodhara* with *Dashmoola Taila* were administered in addition to oral medications, which resulted in a gradual reduction in both the frequency and severity of migraine episodes. From the fourth visit onwards, *Kushmand Rasayana* was introduced as a *Rasayana* therapy along with *Godanti Bhasma* and *Shirashooladivajra Rasa*, accompanied by continued use of *Shatabindu Taila Nasya*. This regimen was associated with a progressive improvement in symptoms, reflected in the reduction of the MIDAS score from 20 at baseline to 15 by the fourth visit. In subsequent follow-ups, the treatment was streamlined to *Kushmand Rasayana* and *Shatabindu Taila Nasya*, leading to further symptomatic relief, significant reduction in headache intensity, and marked decrease in the frequency of migraine attacks.

By the sixth visit, the patient reported only one migraine episode in the preceding 15 days, with near-complete resolution of associated symptoms such as nausea, vomiting, photophobia, and

phonophobia. At the final follow-up, only one episode was reported over the past month, with the MIDAS score reduced to 4 and the NPR score to 2, indicating substantial clinical improvement and enhanced quality of life. Details of the therapeutic timeline and outcome are listed in Table 4.

***Nasya* (*Marsha Nasya* with *Anu Taila*) - Procedure (step-wise):**

A.*Poorvakarma* (Pre-operative): The patient was informed about the procedure and consent obtained; advised to report on an empty stomach (2–3 hours post-meal), followed by gentle local *snehana* (oil massage) of the face, neck, and shoulder region for 3–5 minutes to facilitate relaxation and secretion mobilization.

B. *Pradhana karma* (Operative): The patient was positioned in a supine posture with the head slightly lower than the trunk and the neck gently extended to facilitate nasal instillation. Lukewarm *Anu Taila* was used for *Marsha Nasya*, and approximately 6–10 drops were administered into each nostril in a single session using a sterile dropper. The patient was instructed to take a gentle inhalation during instillation and remain in the supine position for 2–3 minutes afterwards to allow uniform distribution of the medicated oil within the nasal passages.

C. *Pashchat Karma* (Post-Operative): After the administration of *Nasya*, the patient was advised to remain in a supine position for about a minute (approximately the time required to count up to 100) and to spit out any medicine that reached the mouth. Mild fomentation (*swedana*) was then applied over the supraclavicular region, followed by gargling with warm water to expel residual mucus from the throat. *Dhumapana* with *Haridra Dhuma Varti,* was advised subsequently.

***Shirodhara* was performed as briefed below**

Shirodhara: A. *Poorvakarma* (Pre-operative)-The Patient was examined and ensured indications for *Shirodhara*, as the patient had a headache, disturbed sleep, and a stressed state.

Preparation of the patient: The patient was asked to complete her natural urges like bowel and bladder evacuation, then a head and neck-shoulder massage was given. A thick cord prepared of cotton and tied around the head just above the eyebrows and ears to prevent oil come down to the eyes. The eyes were covered with cotton pads. The ears were closed with cotton buds. The patient was asked to lie down on a *Droni* (massage table) in the supine position. A rolled towel was placed beneath the neck.

B. *Pradhan Karma* (Operative)

Poured Lukewarm *Taila* into the dripping apparatus, i.e. *Dharapatra,* made up of Bronze, having *Varti* inserted into the nozzle. *Varti* (cotton thread) should hang down so that the tip of the *Varti* (cotton thread) from the forehead was maintained at the level 8 cm (4 *angula*) and the height of *Dharapatra* was 20 cm above the forehead of the patient.

C. *Paschat Karma* (Post-operative)

The cord and earplugs were removed properly. The Oil from the head is soaked. The patient was advised to have a bath after half an hour in the lukewarm water and to take the rest. The patient was advised to take a light diet.

Table 4: Therapeutic intervention with timeline and outcome.

Visit No. &	Prescribed Medicines	Procedure	Observations	MIDAS Score	NPR Score

Date					
1st Visit(29 March 2024)	*1. Godanti Bhasma* – 250 mg BD orally after food *2. Pathyadi Kwatha* – 20 ml BD before food 3.*Shatabindu Taila* Nasya(17) -4 drops (2 drops each nostril) in the morning 4. *Avipattikar Churna* (18) -5 g orally at bedtime with lukewarm water		Observations on first day of OPD visit with complaints of headache on the left side (throbbing and pulsating in nature) associated with nausea, vomiting, sensitivity to light and sound for 2 years	20	10
2nd Visit (15 April 2024)	1. *Sootashekara Rasa* – 1 tablet BD orally before food with lukewarm water 2. *Pathyadi Kwatha* – 20 ml BD before food 3. *Shira Shooladi Vajra Rasa* (19)-2 tablets BD orally after food		No improvement in the intensity of the Headache	19	10
3rd Visit(5 May 2024)	1. *Shira Shooladi Vajra Rasa* – 2 tablets BD orally after food 2. *Godanti Bhasma* – 250 mg BD orally after food 3. *Avipattikar Churna*- 5 g orally at bedtime with lukewarm water	•*Marsha Nasya* with Anu taila (7 days, 16–22 March 2024) •*Shirodhara* with *Dashmoola Taila* (7 days, 30 March–5 April 2024)	Gradual reduction in the severity and frequency of migraine episodes	17	8
4th Visit(4 June 2025)	1. *Shira Shooladi Vajra Rasa* – 2 tablets BD orally after food2. *Godanti Bhasma* – 250 mg BD orally after food3. *Kushmand*		Improvement in symptoms with decreased frequency of episodes	15	5

	Rasayana – 10 g OD orally before food in the morning with lukewarm water4. *Shatabindu Taila* Nasya – 4 drops (2 drops each nostril) in the morning				
5th Visit (17 June 2025)	1.*Kushmand Rasayanaa* - 10 g OD orally before food in the morning with lukewarm water. 2. *Shatabindu Taila* Nasya – 4 drops (2 drops each nostril) in the morning		Further reduction in frequency and severity of attacks	10	3
6th Visit (30 June 2025)	1.*Kushmand Rasayanaa* - 10 g OD orally before food in the morning with lukewarm water2. *Shatabindu Taila* Nasya – 4 drops (2 drops each nostril) in the morning		Patient experienced relief from associated symptoms, with a marked reduction in headache intensity during migraine episodes, and the frequency of attacks decreased to only once in the past 15 days.	6	3
7th Visit (15 July 2025)	1.*Kushmand Rasayanaa*-10 g OD orally before food in the morning with lukewarm water		Only one episode of migraine attack in the past month	4	2

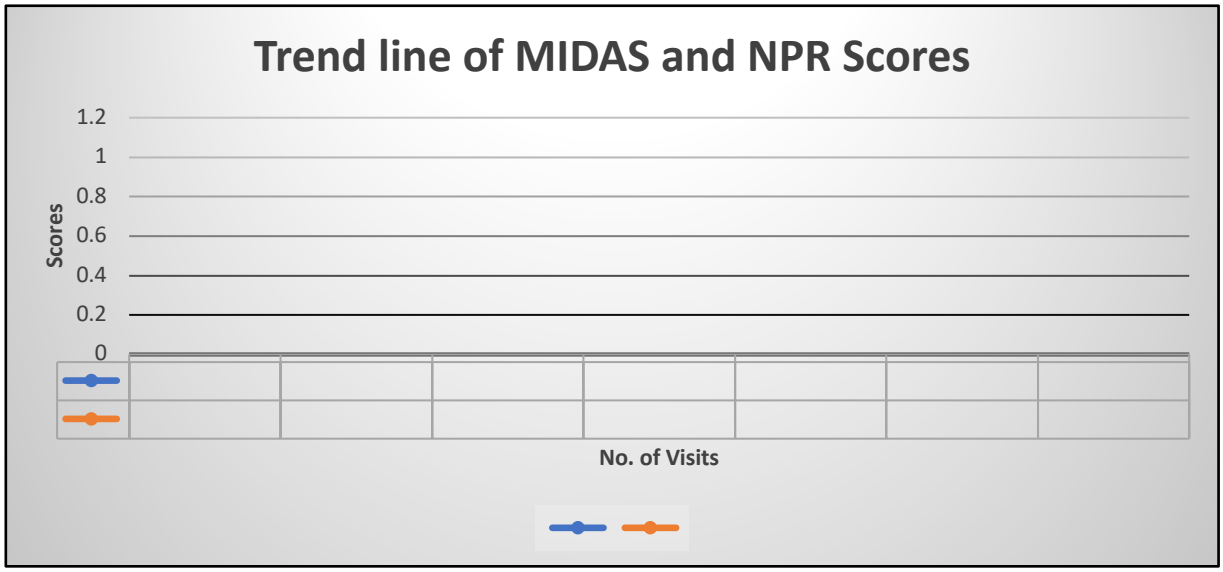

Figure 2. Trend of MIDAS and NPR scores across successive visits. The graph demonstrates a steady decline in the Migraine Disability Assessment (MIDAS) score

Dietary Intake

The patient was advised a light and easily digestible diet comprising *mung* (green gram), *mung* soup, and freshly cooked vegetables such as bitter gourd (*Momordica charantia*), fenugreek leaves (*Trigonella foenum-graecum*), ridge gourd, sponge gourd, bottle gourd, pointed gourd, and ash gourd. The inclusion of brown rice and *Sali* rice was recommended, with *Sali* rice referring specifically to a traditional, easily digestible variety of rice described in Ayurvedic texts for its *Laghu* (light) and *Tridoṣa-Sāmaka* (balancing) properties, rather than ordinary polished rice. Lukewarm water, cow's milk, and clarified butter (*ghṛta*) were also advised in moderate quantities to promote nourishment and tissue strength. The patient was instructed to avoid greasy, spicy, fermented, and refined foods, as well as excessive salt, pickles, curd, buttermilk, tomato, lemon, biscuits, and other incompatible or heavy dietary items.

Follow-up And Outcome

During the first and second visits, the patient experienced persistent migraine episodes with no significant improvement in frequency or intensity, despite a reduction in associated symptoms such as nausea and gastric discomfort. Following the administration of *Marsha Nasya* with *Anutaila* and *Shirodhara* with *Dashmoola Taila*, a notable reduction in severity and recurrence was observed, with the MIDAS score improving from 20 to 17 and the NPR score from 10 to 8.

With the subsequent introduction of *Kushmand Rasayanaa* along with continued *Shatabindu Taila Nasya*, the patient reported progressive relief, as the MIDAS score further reduced to 10 and the NPR score to 3. By the final follow-up, only a single episode of migraine occurred within a month, and the scores declined to MIDAS 4 and NPR 2, reflecting a marked improvement in functional ability and quality of life.

Table 5: Assessment of Signs and Symptoms During the Course of Treatment and Follow-up

Signs and Symptoms	BT	1st week	3rd week	5th week	Follow-up
Severity of	3	3	2	0	No recurrence

headache					
Vomiting	2	2	1	0	No recurrence
Nausea	3	3	2	0	No recurrence
Associated symptoms	2	1	0	0	No recurrence

Discussion

According to Ayurvedic texts, *Shirashoola*, also known as a headache, is a symptom of several systemic disorders and a separate clinical entity. It is categorized according to the qualitative nature of the pain and the prevalence of particular doshas. Identifying the underlying pathogenesis is crucial to developing a suitable and successful treatment strategy. (20) Three essential elements made up the therapeutic approach in this instance: *Samana Cikitsa*, *Sirodhara*, and *Nidana Parivarjana*. both *Sirodhara* and *Marsa Nasya* likely contributed to the therapeutic outcome. Scientific studies support that *Sirodhara* induces a neuroendocrine stress-modulating effect: in healthy volunteers, it reduced heart rate, blood pressure, and increased alpha-wave EEG rhythm, consistent with a relaxed-alert state. In a 14-day case, *Sirodhara* significantly lowered serum cortisol and DHEA, correlating with mood improvements. Meanwhile, *Nasya* leverages the unique anatomy of the nasal cavity: modern evidence demonstrates that intranasal administration can deliver compounds directly to the brain via the olfactory and trigeminal nerves, effectively bypassing the blood–brain barrier. Ayurvedic reviews also note that the highly vascular and neural nature of the nasal mucosa provides both local (sinonasal) and central (neurovascular) effects. Thus, while *Sirodhara* may have provided a strong systemic calming and HPA-axis regulatory effect, *Nasya* likely acted more focally on the head region (*Urdhvajatrugata*). The therapeutic emphasis on *Sirodhara* in our discussion reflects its hypothesized broader modulation of stress pathways in this patient rather than an assumption of superior efficacy. Avoiding the causes of the condition was stressed by *Nidana Parivarjana*. *Shirodhara*, a traditional therapeutic technique that involves continuously dousing the forehead with medicated liquids, was used to calm agitated doṣas and promote relaxation. *Samana Cikitsa* offered palliative care with the goal of reducing symptoms and reestablishing equilibrium. Because both *Sakha* (peripheral tissues) and *Koṣṭha* (gastrointestinal tract) displayed *Doṣa Prakopa*, which indicates the aggravation of *Vata, Pitta*, and *Kapha*, the integration of these interventions was justified. *Nidana-Parivarjana* was prioritized as the first step in *Samprapti-vighatana*. The identified *Nidanas* included dietary triggers (*Kaṭu*, *amla*, *vidahi ahara*), irregular sleep habits, stress, and excessive sensory stimulation. Their systematic avoidancea-along with institution of a *pitta-vāta-śāmaka* diet and lifestyle modifications-was instrumental in reducing symptom intensity and preventing further *doṣa prakopa*. This foundation likely enhanced the responsiveness to subsequent *Sodhana* and *Samana* therapies.This method lessened the intensity of symptoms and prevented additional *Doṣa Prakopa* (aggravation of doṣas). Given that the patient had *Pitta vṛddhi* symptoms, the next step in the treatment plan was to eliminate aggravated doṣas, specifically *Pitta*, using *Koshta Shodhana Mridu virechana* with *Avipattikar Churna* (21).

Avipattikar Churna gastroprotective effect is supported by preclinical data: in a rat pylorus-ligation model, it significantly reduced ulcer score, gastric volume, and acidity, similar to ranitidine. Additionally, the formulation is known to neutralize stomach acidity and increase

digestive fire. Better efficacy and bioavailability of later medications were made possible by achieving *Koṣṭha Suddhi*. Its therapeutic role is further supported by pharmacological studies, as several of its ingredients have gastroprotective properties: *Suṇṭhi* reduces gastric secretion, strengthens mucosal defence, and increases resistance; *Hariatki*, *Marica*, and *Pippali* show cytoprotective effects on the gastric mucosa; and *Lavaṅga* helps by promoting mucus secretion and maintaining basal gastric mucosal blood flow. (23) The patient was given *Godanti Bhasma*, an oral medication, in the next section. It is traditionally prescribed for *Pitta* disorders, which are characterized as cooling and *daha prashamana,* which correspond to migraine symptoms. Its main ingredient, gypsum, may have functions in vascular modulation, neuronal excitability, and calcium regulation. Its possible value in the treatment of migraines is further supported by new data showing anti-inflammatory and analgesic effects. *Godanti Bhasma* (anhydrous calcium sulfate) has been shown to be internalized by mammalian cells and induce vacuolation without cytotoxicity, indicating potential intracellular modulation, and has demonstrated anti-inflammatory activity in modern analytical studies. To treat migraines, *Pathyadi Kwatha*, which is recommended in *Shiroroga,* combines *Vata-samaka* and *Uṣṇa Virya* properties. possess neuroprotective, anti-inflammatory, and antioxidant properties. Its traditional justification for managing headaches is supported by these effects, which may lessen oxidative stress, stabilize vascular tone, and alter nociceptive pathways. To achieve *Tridoṣa Samana* and stop further blood vitiation, the patient was prescribed palliative formulations such as *Sootashekhara Rasa* (24) and *Shirashooladi Vajra Rasa* (25). *Shirashooladi Vajra Rasa* reduces headache intensity by achieving a complete Tridoṣa balance, while Sootashekhara Rasa is known for its *Pitta-Samaka* qualities, which support gastrointestinal homeostasis. The patient's MIDAS and NPR scores decreased, indicating a significant clinical improvement. Table 4.

Role of *Panchakarma* and *Bahya Parimarjana* Procedures

Procedures like *Anu Taila Nasya* (nasal instillation) were prescribed due to its local *doṣa*-pacifying and *Sodhana* (cleansing) effects, making it beneficial in disorders of the head and neck.(26),(27) *Nasya* is a bio-purification technique in which medicated formulations are administered intranasally, allowing direct access to the brain and systemic distribution. The medicament reaches the *Sṛṅgaṭaka marma* (a vital point at the nasal base) and subsequently spreads to the head, eyes, ears, and throat, facilitating the elimination of morbid doṣas. Mechanistically, this effect can be correlated with stimulation of the central nervous system via olfactory and respiratory pathways. The nasal epithelium, being a highly permeable monolayer with rich submucosal vasculature, enables rapid absorption and direct systemic entry of drugs, bypassing hepatic first-pass metabolism. Intranasal delivery thus provides a promising route for targeting the central nervous system, and *Shirodhara,* on the other hand, is classified under *Bahya Parimarjana Cikitsa* (external purification therapy) providing synergistic benefits by its *urdhvajatrugata vata-pitta shaman* action, reduced headache intensity and improved sensory stability. *Shirodhara* with *Dashmoola Taila Dashmoola* exhibits *Shothahara* (anti-inflammatory), *Tridoshaghna* (balancing all three Doshas), and *Ama Pacana* (detoxifying) properties, which make it beneficial in the management of *Vātavyadhi*, where it is traditionally employed in the forms of *Pradeha* (external application), *Parisheka* (therapeutic sprinkling), and *Abhyanga* (oil massage). Calms the *Manovaha srotas* through its *vata-shamana* and *manasika dosha* balancing. Modern studies have demonstrated that

Sirodhara produces relaxation by modulating the hypothalamic–pituitary–adrenal (HPA) axis and autonomic nervous system, reducing cortisol and sympathetic activity. These effects parallel modern stress-relief and neuroendocrine regulation mechanisms, thereby substantiating its role as an effective *Bāhya Parimarjana* therapy for Migraine.

Clinical outcomes

The gradual improvement observed from a baseline MIDAS score of 20 and NPR score of 10 to a final score of 4 and 2, respectively-highlights the clinical efficacy of the integrative regimen. The frequency of migraine attacks reduced from several times per month to a single episode in one month, with near-total remission of associated symptoms. This improvement indicates not only symptomatic relief but also a possible preventive role, which is consistent with the Ayurvedic approach of both *shamana* (curative) and *rasayana* (rejuvenative) therapy.

Comparative insights

Modern pharmacological interventions for migraine often focus on symptomatic relief, with limited scope for long-term prevention and significant risk of adverse effects. In contrast, Ayurvedic formulations such as *Pathyadi Kwatha* and *Kushmand Rasayana*, coupled with *Nasya* and *Shirodhara*, offer a holistic approach addressing the root cause (*nidana parivarjana* and *dosha-pratyanika chikitsa*) while improving systemic balance. Previous experimental and clinical studies have shown neuroprotective, anti-inflammatory, and antioxidant properties of several ingredients used in these formulations, which may correlate with the observed clinical benefits.

Overall interpretation

The outcome of this case highlights that a rationally designed Ayurvedic regimen, integrating *Rasoushadhis*, *Rasayana* therapy, and *Kriyakalpa* procedures, can provide sustained relief in chronic migraine without reported adverse effects. These results warrant further validation through larger clinical studies and controlled trials to establish standardized protocols for Ayurvedic migraine management.

Conclusion

The management of migraine (Tridoṣaja Ardhāvabhedaka) in Ayurveda emphasizes first the avoidance of *nidāna* (etiological factors/triggers), followed by *Samprāpti Vighatana* through interventions such as Panchakarma procedures, *Rasayana* therapy, and individualized medication. Procedures such as Nasya and Shirodhara play a pivotal role in disrupting the disease pathway and alleviating symptoms. Importantly, Ayurvedic treatment is highly individualized, tailored to the *rogi* and *Vyadhi Avastha*, and therefore cannot be generalized to all cases. Larger, well-designed clinical studies are needed to validate its efficacy and reproducibility.

Declaration Of Patient Consent:

The authors certify that they have obtained the patient's consent form, in which the patient has given their consent for reporting the case, along with images and other clinical information, in the journal. The patient understands that her name and initials will not be published and due efforts will be made to conceal her identity; however, anonymity cannot be guaranteed.

Patient perspective:

The patient expressed deep satisfaction with the treatment and its outcomes. She reported marked relief from recurrent migraine episodes and associated discomfort, which had previously hindered her ability to perform daily activities. Following therapy, she was able to

resume her routine tasks with improved concentration.

Declaration of use of generative AI in scientific writing: The corresponding author declares that no tools, services, or AI were used; only basic tools, such as the Grammarly app, were used for checking grammar

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