RESEARCH PAPER

Therapeutic Efficacy of Classical Ayurvedic Shamana Chikitsa And Sira Vyedhana in Ardhavabhedaka W.S.R to Migraine: A Prospective Clinical Case Series

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ABSTRACT

Background

Ardhavabhedaka is one among the eleven Shirorogas described in Ayurvedic classics and clinically resembles migraine headache.[1] Migraine is a chronic disabling neurovascular disorder characterized by recurrent attacks of unilateral throbbing headache associated with nausea, vomiting, photophobia and phonophobia.[2] According to the Global Burden of Disease study, migraine is one of the leading causes of years lived with disability worldwide.[3] Contemporary management includes analgesics, triptans, beta blockers and antidepressants; however, recurrence, medication dependency and adverse effects remain major concerns.[4] Ayurveda provides a holistic therapeutic approach through Shamana Chikitsa, Ghrita preparations and para-surgical interventions such as Sira Vyedhana.[5]

Aim

To evaluate the efficacy of Avipatti Churna, Dhatryadi Kashayam, Godanti Bhasma, Mahatiktaka Ghrita and Sira Vyedhana in the management of Ardhavabhedaka w.s.r to Migraine.

Materials and Methods

A prospective open-label interventional case series study was conducted on 10 patients diagnosed with Ardhavabhedaka/Migraine attending the OPD and IPD of the Department of Kayachikitsa, GAM Puri. Patients received Avipatti Churna 3 g, Dhatryadi Kashayam 15 ml, Godanti Bhasma 250 mg and Mahatiktaka Ghrita 1 teaspoon twice daily before food for 90 days. Sira Vyedhana at Sankha-Lalata Sandhi was performed once weekly for 28 days. Assessment was carried out using Visual Analogue Scale (VAS), frequency and duration of headache attacks, MIDAS score and associated symptoms such as nausea, vomiting and photophobia.

Results

Significant improvement was observed in all clinical parameters. Mean headache intensity reduced by 78.1%, frequency of attacks reduced by 74.2%, duration of headache reduced by 69.8% and MIDAS disability score reduced by 72.5%. Associated symptoms including nausea, photophobia, irritability and sleep disturbance also improved markedly. No adverse reactions were observed during the study period.

Conclusion

The combined administration of Avipatti Churna, Dhatryadi Kashayam, Godanti Bhasma and Mahatiktaka Ghrita for 90 days along with Sira Vyedhana for 28 days demonstrated promising results in the management of Ardhavabhedaka. The therapy was found safe, economical and clinically effective in reducing migraine-associated disability and improving quality of life.

Keywords: Ardhavabhedaka, Migraine, Dhatryadi Kashayam, Sira Vyedhana, Avipatti Churna, Godanti Bhasma, Mahatiktaka Ghrita, Ayurveda, Case Series.

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INTRODUCTION

Ayurveda, the ancient Indian system of medicine, emphasizes preservation of health and eradication of disease through individualized and holistic therapeutic approaches.[1] Diseases affecting the head are categorized under Shiroroga, among which Ardhavabhedaka is considered one of the most severe and debilitating disorders.^5 Acharya Sushruta describes Ardhavabhedaka as severe episodic pain affecting one half of the head associated with splitting and piercing sensations.[6]

The clinical presentation of Ardhavabhedaka closely resembles migraine described in contemporary medicine. Migraine is a chronic neurological disorder characterized by recurrent unilateral pulsating headache associated with nausea, vomiting, photophobia and phonophobia.[2] Migraine attacks adversely affect occupational productivity, emotional wellbeing and social functioning.

Globally, migraine affects nearly one billion individuals and is among the leading causes of neurological disability.[3] Women are affected more frequently due to hormonal influences and psychosocial stressors.[7] In recent years, excessive screen exposure, mental stress, irregular dietary habits, sleep disturbances and sedentary lifestyles have contributed to rising prevalence among younger populations.

Modern medicine attributes migraine pathogenesis to activation of the trigeminovascular system, cortical spreading depression and release of inflammatory neuropeptides such as calcitonin gene-related peptide (CGRP).[8] Although several pharmacological agents are available for symptomatic and prophylactic management, long-term therapy is associated with adverse effects including gastritis, rebound headache, sedation and medication dependence.[4]

Ayurveda considers Ardhavabhedaka predominantly as a Vata-Pitta dominant disorder involving Rakta Dushti and vitiation of Rasavaha and Manovaha Srotas.[9] Nidanas such as Ratrijagarana, Vega Dharana, Atapa Sevana, fasting, stress and incompatible dietary practices aggravate Doshas leading to pathological manifestations in the Shirah Pradesh.[10]

Avipatti Churna is known for Deepana, Pachana and Pittashamana properties. Dhatryadi Kashayam acts as a Pittahara, Dahaprashamana and Rasayana formulation beneficial in inflammatory and stress-related conditions. Godanti Bhasma possesses Vedanasthapana and Sheetala actions, while Mahatiktaka Ghrita acts as a Tridoshahara and neuroprotective formulation.[11] Sira Vyedhana, an important para-surgical procedure described by Acharya Sushruta, is specifically indicated in Shirorogas and conditions involving Rakta Dushti.[12]

AIM AND OBJECTIVES

Aim

To evaluate the efficacy of Avipatti Churna, Dhatryadi Kashayam, Godanti Bhasma, Mahatiktaka Ghrita and Sira Vyedhana in the management of Ardhavabhedaka (Migraine).

Objectives

1. To assess reduction in headache intensity and frequency.

2. To evaluate improvement in associated symptoms such as nausea, vomiting and photophobia.

3. To assess changes in MIDAS disability score.

4. To evaluate safety and tolerability of the treatment protocol.

MATERIALS AND METHODS

Study Design - Prospective open-label interventional case series study.

Sample Size - 10 patients clinically diagnosed with Ardhavabhedaka/Migraine.

Source of Data - Patients were selected from the OPD and IPD of the Department of Kayachikitsa after obtaining informed consent.

DIAGNOSTIC CRITERIA

- Recurrent unilateral throbbing headache

- Moderate to severe pain intensity

- Nausea and/or vomiting

- Photophobia or phonophobia

- Aggravation during stress and fatigue

- Episodic attacks lasting 4–72 hours

INCLUSION CRITERIA

1. Patients aged between 18–60 years.

2. Clinically diagnosed cases of migraine.

3. Patients willing to participate and follow treatment protocol.

EXCLUSION CRITERIA

1. Secondary headache disorders.

2. Intracranial lesions.

3. Severe uncontrolled systemic illness.

4. Pregnancy and lactation.

5. Psychiatric illness requiring intensive medication.

TREATMENT PROTOCOL

Internal Medications

Drug	Dose	Frequency
Avipatti Churna	3 gm	BD Before food
Dhatryadi Kashayam	15 Ml	BD After food
Godanti Bhasma	250 mg	BD Before food
Mahatiktaka Ghrita	5 ML	BD Before food

Duration of internal medication: 3 months.

PROCEDURE: SIRA VYEDHANA

Site - Sankha-Lalata Sandhi.

Frequency - Once weekly.

Duration - 28 days.

Procedure -

Patients were made to sit comfortably under adequate lighting conditions. After proper aseptic precautions, Sira Vyedhana was performed at Sankha-Lalata Sandhi using sterile instruments according to classical Ayurvedic guidelines.[12] Controlled bloodletting was performed considering Bala and tolerance of the patient. Post-procedure care included local cleansing, monitoring and observation for complications.

ASSESSMENT CRITERIA

Subjective Parameters

1. Shirashoola

2. Bhrama

3. Hrillasa

4. Chardi

5. Photophobia

6. Sleep disturbance

Objective Parameters

1. Visual Analogue Scale (VAS)

2. MIDAS score

3. Frequency of attacks

4. Duration of headache episodes

OBSERVATIONS

Among the enrolled patients:

- 70% were females.
- Majority belonged to the age group of 20–40 years.
- Stress was the most common precipitating factor.
- Irregular sleep and dietary habits were frequently observed.
- More than half the patients had symptoms for over 2 years.

The predominance of female patients supports previous epidemiological findings regarding hormonal and psychosocial influences in migraine.[7]

RESULTS

Parameter	Before Treatment	After Treatment	% Relief
VAS Score	8.4	1.8	78.1%
Frequency/month	11.2	2.9	74.2%
Duration (hours)	9.2	2.8	69.8%
Nausea Score	2.9	0.6	79.3%
Photophobia Score	2.7	0.6	77.8%
MIDAS Score	25.1	6.9	72.5%

Marked improvement was also observed in sleep quality, emotional stability, concentration and work productivity.

CASE-WISE CLINICAL OUTCOME BEFORE AND AFTER TREATMENT

Case	Frequency/ Month BT	Frequency/ Month AT	VAS BT	VAS AT	Major Outcome
1	14	3	9	2	Reduced photophobia and headache severity
2	12	3	8	2	Improved sleep and reduced analgesic use
3	11	2	9	2	Reduced menstrual migraine episodes
4	10	3	8	2	Improved MIDAS disability score
5	9	2	8	1	Reduced analgesic dependency
6	13	2	9	1	Complete cessation of vomiting
7	10	3	8	2	Improved anxiety and sleep
8	8	3	7	3	Moderate improvement in chronic headache
9	11	2	8	1	Improved work efficiency
10	12	3	9	2	Improved quality of life

CASE SUMMARIES **Case 1**

A 26-year-old female presented with recurrent unilateral throbbing headache predominantly affecting the right temporal region for the past 4 years. Headache episodes were associated with nausea, photophobia and irritability. The attacks were aggravated by prolonged fasting, exposure to sunlight and inadequate sleep. Following completion of therapy, attack frequency reduced significantly with marked reduction in pain severity and photophobia.

Case 2
A 32-year-old male IT professional reported chronic stress-induced migraine characterized by pulsating left-sided headache associated with neck stiffness and phonophobia. Aggravating factors included prolonged screen exposure, occupational stress and sleep deprivation. Significant reduction in headache severity and improved sleep quality were observed after treatment.

Case 3
A 29-year-old female suffering from menstrual migraine presented with a severe unilateral headache associated with nausea, vomiting and marked photophobia. Symptoms were aggravated during the premenstrual period, emotional stress and irregular meals. Substantial reduction in nausea, photophobia and attack frequency was observed after intervention.

Case 4
A 41-year-old female with chronic migraine for 8 years presented with severe recurrent headaches associated with heaviness of head and burning sensation. Symptoms were aggravated by mental stress and heat exposure. Significant improvement in daily activities and MIDAS score was observed.

Case 5
A 35-year-old male presented with episodic migraine associated with irritability and blurred vision. Irregular diet and late-night work schedules acted as precipitating factors. Headache frequency and analgesic dependence reduced considerably following treatment.

Case 6
A 24-year-old female reported recurrent migraine attacks associated with severe vomiting and dizziness. Symptoms were aggravated by fasting and emotional stress. Complete cessation of vomiting and marked reduction in headache severity were observed after therapy.

Case 7
A 38-year-old female with anxiety-induced migraine complained of recurrent unilateral headache associated with disturbed sleep and palpitation. Significant symptomatic relief and improved sleep quality were noted following treatment.

Case 8
A 45-year-old male presented with chronic recurrent frontal headache aggravated by prolonged driving and physical exhaustion. Moderate but clinically meaningful improvement in headache duration and severity was observed.

Case 9
A 30-year-old female complained of a severe throbbing headache associated with fatigue and photophobia. Irregular sleep and prolonged mobile phone usage were major triggering factors. Marked improvement in work efficiency and sleep pattern was observed after therapy.

Case 10
A 33-year-old female presented with recurrent migraine attacks associated with nausea and dizziness aggravated by stress and hormonal fluctuations. Significant reduction in attack frequency and improvement in quality of life were observed.

DISCUSSION

Ardhavabhedaka is predominantly a Vata-Pitta disorder with significant involvement of Rakta Dushti and neurovascular dysregulation.[9] The present treatment protocol was designed to address multiple pathological mechanisms simultaneously.

Avipatti Churna acts through Deepana, Pachana and Pittashamana mechanisms. By correcting Agni Dushti and reducing Amlapitta, it may help decrease systemic inflammatory processes associated with migraine pathogenesis.

Dhatryadi Kashayam possesses Pittahara, Dahashamana and Rasayana properties. The Amalaki-dominant formulation provides antioxidant and anti-inflammatory effects which may help reduce neurogenic inflammation and oxidative stress implicated in migraine attacks.

Godanti Bhasma is traditionally indicated in Shirashoola and Pittaja disorders.[13] Its cooling and analgesic properties help alleviate headache severity and associated burning sensation.

Mahatiktaka Ghrita acts as a Tridoshahara and Medhya formulation. Ghrita serves as a Yogavahi facilitating deeper tissue penetration and nourishment of nervous tissue.

Sira Vyedhana plays an important role in reducing Rakta Dushti and local vascular congestion.[12] Controlled bloodletting may improve cranial microcirculation and reduce inflammatory mediators implicated in migraine attacks.

The reduction in MIDAS disability scores indicates substantial improvement in functional capacity, psychosocial wellbeing and overall quality of life. No

adverse effects were reported, suggesting good safety and tolerability of the treatment protocol.

LIMITATIONS

1. Small sample size.
2. Lack of control group.
3. Absence of long-term follow-up.
4. Subjective variability in pain perception.

CONCLUSION

The present open-label case series demonstrated that Avipatti Churna, Dhatryadi Kashayam, Godanti Bhasma and Mahatiktaka Ghrita administered for 90 days along with Sira Vyedhana for 28 days produced significant clinical improvement in patients suffering from Ardhavabhedaka (Migraine).

The treatment protocol effectively reduced headache intensity, frequency, duration and associated symptoms such as nausea and photophobia. Significant improvement in MIDAS disability scores and quality of life was also observed. No adverse effects or complications were noted during the study period.

The therapy appears safe, economical and clinically effective for migraine management. Further randomized controlled trials with larger sample sizes and longer follow-up duration are recommended to establish stronger scientific evidence and validate the therapeutic potential of this integrative Ayurvedic approach.

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