AYURPUB.com
INTERNATIONAL AYURVEDA PUBLICATIONS

RESEARCH ARTICLE *ISSN 2456-0170*

CLINICAL EVALUATION OF DASHAMOOLADI KWATHA YOGA NASYA IN THE MANAGEMENT OF ARDHAVABHEDAKA WITH SPECIAL REFERENCE TO MIGRAINE

[1]Dr. Nithya K N [2]Dr. Rashmi R

[1]P.G Scholar [2]Professor and HOD, Dept of Panchakarma, Ramakrishna Ayurveda Medical College and Hospital, Bengaluru, Karnataka

ABSTRACT

Ardhavabhedaka is a type of Shiroroga in which pain is felt in one half of the Shiras having periodic attacks with Photophobia and phonophobia. Its symptoms are most appropriately related to Migraine headache. It is one of the most common cause of recurrent headache with numerous manifestations that can involve CNS and vascular system. Ayurveda has mentioned various treatment modalities in the management of Ardhavabhedaka, where Nasya Karma is considered as a prime treatment modality in all types of shiroroga. The objective of present study was to evaluate the efficacy of Dashamooladi Kwatha Yoga in the management of Ardhavabhedaka w.s.r to Migraine. A single group of 30 patients were selected randomly on the basis of clinical symptoms of Ardhavabhedaka and subjected to Dashamooladi Kwatha Nasya 6 drops in each nostril for 7 days. Therapeutic effect was observed using the subjective criteria which were graded and analyzed statistically and it was observed that Dashamoola kwatha nasya was having significant improvement on all the parameters.

KEYWORDS: Ardhavabhedaka, Migraine, Dashamooladai kwatha yoga, Ayurveda

INTRODUCTION

Ayurveda Acharayas have mentioned about the Shiro-roga of which Shirah-shoola as the main symptom and also they have taken Shirah-shoola as the synonym of Shiro-roga[1]. In Ayurvedic text, almost all the Acharayas have mentioned Ardhavabhedaka in Shiro-roga. Acharaya Sushruta has mentioned 11 types of Shiro-roga in Uttar Tantra[2]. Among them, one of them is Ardhavabhedaka in which paroxysmal unilateral headache associated with vertigo and pain of varying intensity is seen. According to Acharaya Sushruta, it is a tridoshaja[3] disease and according to Acharaya Charaka it is Vataja or Vata-Kaphaja[4]. This can be correlated with Migraine Headache.

Migraine is one of the common causes of recurrent headache. According to IHS (International Headache Society), Migraine constitutes 16% of the primary headache and affects 10-20% of the general population. It is three times more common in women than men. It is under diagnosed and under treated, hence WHO ranks Migraine among the World's most disabling medical illness[5].

The term "migraine" refers to a syndrome of vascular spasms of the cranial blood vessels.

Symptoms of a migraine attack may include heightened sensitivity to light and sound (sonophotophobia), nausea, auras (loss of vision in one eye or tunnel vision), difficulty of speech and intense pain predominating on one side of the head[6].

Migraine can be a challenging disease to diagnose because it is a clinical diagnosis based on symptoms that are subjective and verifiable only by the patient. Migraine can often be recognized by its activators like stress (psychological as well as physical) lack of sleep, worries, red wine, menses, oestrogen, etc and by its deactivators like sleep, relaxation, meditation, pregnancy, exhilaration, drugs like sumatriptan, ergotamine, magnesium sulphate, etc.

A healthy diet, the right amount of sleep, and non-drug approaches, such as biofeedback, should be tried first for prevention. In modern science, the treatment comprises of non-pharmacological treatment such as identification of triggers, meditation, relaxation training, psychotherapy, etc and pharmacotherapy as abortive and preventive therapy. Aspirin, Paracetamol, Ibuprofen, Diclofenac, etc are nonspecific abortive therapy, whereas Ergot, 5-HTreceptor agonists are specific abortive therapy. Similarly, Beta blockers, Calcium channel blockers, Triptans, Anti-convulsant, etc are preventive therapy[7]. Many medications have been tried and a lot are still in research work also, but these modern drugs are not acceptable due to their drawbacks. All the medications, either the older one or the newly available one have a lot of side effects (GIT distress, etc). Also they cause drug dependence, drug withdrawal syndrome, relapse of headache within hours and chances of getting chronic headache. Several drugs cannot be prescribed in Migraine associated with other medical illness, which is a high drawback in modern science.

In contrast to that Ayurveda has a variety of natural medication in the treatment of various types of Shirah-roga. All Shiro-rogas are due to tridosha prakopa and chiefly due to Vata or Vata-Kapha. Thus, Ardhavabhedaka, a sadhya type of Shiro-roga can be best managed with ausadhis having Ushna, Snigdha, etc Vatahara or Vata-Kaphahara properties[8]. Ardhavabhedaka is best treated with Ghrita, Taila and Majja, Shiro Virechana, Kaya Virechana, Nadisveda, Niruha and Anuvasana, Basti, Upanaha and Shiro-basti[9].

Ayurveda is such a system of medicine where the importance of both prevention and cure has been highlighted. Hence, the procedure Nasya karma is indicated to uproot the deep-seated disease. From the above observations, Dashamoola Kwatha Yoga[10] in the form of nasya which is having Vatahara properties has been selected as Shodhana therapy in the present study.

AIMS AND OBJECTIVES

1. To study the concept of Ardhavabhedaka as per as Ayurvedic text and their discussion with current medical prospective
2. To evaluate the efficacy of Dashamooladi Kwatha Yoga Nasya Karma in the management of Ardhavabhedaka.

MATERIALS AND METHODS

Aushadhi Yoga

1. Dashamooladi Kwatha Yoga

Table 1 : Showing the ingredient of Dashamooladi Kwatha Yoga

Drug Name	Rasa	Guna	veerya	Vipaka	Doshagnata	Karma
Bilwa L- Aegle marmelos F- Rutaceae	Kashaya , Tiktha	Laghu Ruksha	Ushna	Katu	KV ↓	Deepana, Snehana, Anulomana, Shothahara
Agnimantha L- Clerodendrummultiforum F- Verbenaceae	Tikta, katu , kashaya , madhura	Ruksha Laghu	Ushna	Katu	KV↓	Deepana , Nadibalya, Shonitasthapana
Shyonaka L- Oroxylum indicum F- Bignoniaceae	Madhura Tikta Kashaya	Laghu Ruksha	Ushna	Katu	KV↓	Vedanasthapana Deepana, pachana, Shothahara
Gambhari L- Gmelina arborea F- Verbenaceae	Tikta Kashaya Madhura	Guru	Ushna	Katu	VPK↓	Vedanasthapana, Deepana, pachana, Shothahara, Rechana, Amadoshanashaka
Patala L- Steriospermumsuveolens F- Bignoniaceae	Tikta Kashaya	Laghu Ruksha	AnUshna	Katu	VPK↓	Saraka, Deepana, pachana, Shothahara, vedanasthapana
Shalaparni L- Desmodiumgangeticum F- Fabaceae	Madhura , Tikta	Guru Snigdha	Ushna	Madhura	VPK↓	Vranaropana, Deepana pachana, Shothahara, Dahaprashamana
Prishnaparni L- Urariapicta F- Fabaceae	Madhura , Tikta	Laghu Snigdha	Ushna	Madhura.	VPK↓	Deepana, Snehana, Anulomana, Shothahara
Brahati L- Solanum indicum	Katu , Tikta	Laghu Ruksha Tikshna	Ushna	Katu	KV↓	Deepana, Nadibalya, Shonitasthapana

F- Solanaceae						
Kantakari L- SolanumVirginanum F- Solanaceae	Katu , Tikta	Laghu Ruksha Sara	Ushna	Katu	KV↓	Vedanasthapana, Deepana, pachana, Shothahara
Gokshura L- Tribulus terrestris F- Zygophyllaceae	Madhura	Guru , Snigdha	Sheeta	Madhura.	VP↓	Vedanasthapana, Saraka, Deepana pachana, Shothahara, Rechana,
Gritha	Madura	Guru Snigda	Sheeta	Madura		Anulomaka, Bhalya, Sandhaneeya, Tridosha Shamaka,
Saindava Lavana	Madura	Laghu Snigda	Anusna	Katu		Ruchikara, Bhalya Agnideepaka, Tridoshagna

Dose: 6 Bindus each nostrils
Route of Administration: Nasal route
Total no of day: 21 days
Treatment duration will be: 7 days
Follow up duration will be: 14th- 21st day

METHOD

SOURCE OF DATA

a) Clinical data: - patients with classical signs and symptoms of Ardhavabhedaka were selected from OPD and IPD and camps of RAMC Hospital and research centre Bangalore.

b) Literary data: - the literary data of nasya karma, taila, kwatha yoga and Ardhavabhedaka, Migraine was collected from Ayurvedic Samhitas, siddantas, contemporary reputed published journals and retrospective studies.

SOURCE OF DRUG

Genuine raw drugs were collected from the market with proper identification was carried out in the Department of Dravya guna. Dashamoola Kwatha yoga preparation was carried out in the teaching pharmacy of RAMC&H as per AFI and the same has been tested for its standard as per API.

SAMPLE SIZE

a) Patients were selected by random sampling procedure according to classical signs and symptoms of Ardhavabhedaka.

b) Minimum of 30 patients excluding dropouts diagnosed as Ardhavabhedaka were selected for the study.

Inclusion criteria

a) Patients diagnosed with Ardhavabhedaka (Migraine) with following symptoms- Shiras Shula, Nausea, Vomiting, Photophobia, phonophobia aged between 18-50 yrs

b) Patients with chronicity >3months
c) Either gender
d) Patients fit for nasya karma

Exclusion criteria

a) Migraine with aura
b) Patients with depression and psychological disorders
c) Referred pain due to any other disorders
d) Head injury or any brain lesions
e) Trigeminal neuralgia
f) Metabolic and systemic disorders causing headache
g) Pregnancy migraine

CRITERIA FOR ASSESSMENT

Subjective Parameters

a) Frequency of attack
b) Teevrata of Shirashula (Intensity of Headache)
c) Shirashulapravrutti kala (Duration of Headache)
d) Nausea
e) Vomiting
f) Prakashaasahishnuta(Photophobia)
g) Shabdaasahishnuta (Phonophobia)

Table No 2- GRADING TAKEN FOR ASSESSMENT CRITERIA[11]

SL NO	SYMPTOMS	GRADING
1	Frequency of attack	0- No attack 1- Once in a month 2- Once in 15 days 3- Once in a week 4- Twice and more continuous in a week
2	Intensity of pain	0 – No Head ache 1- Mild Headache Patient is aware only he/she pays attention to it 2- Moderate but does not disturb the routine work 3- Severe Headache but does not disturb the routine work 4- Excruciating Headache cant do routine work
3	Duration of pain	0- Nil 1- 1- 3hours per day 2- 3- 6 hours per day 3- 6- 12 hours per day 4- More than 12 hours per day
4	Nausea	0- Absent 1- Present

5	Vomiting	0- Nil 1- Only if Headache does not Subside 2- Vomiting 1-2 times 3- Vomiting 2- 3 times 4- Forced to take medicine to stop vomiting
6	Photophobia	0- Absent 1- Present
7	Phonophobia	0- Absent 1- Present

Assessment Criteria

Assessment was done on the basis of improvement in signs and symptoms.

(Standard scoring methods, visual analogue scale was adopted based on the diagnostic criteria of IHS). Assessment will be done on

Table no 3- Assessment Days

0^{th} Day	During Treatment (after 4^{th} Sitting)	After Treatment (After 7^{th} Sitting)	Follow up 1(on 14^{th} Day)	Follow Up 2(on 21^{st} Day)
BT	DT	AT	F1	F2

Intervention schedule-

Study was intervened by certain instruction given to the patients.

1. Patients were advised to drink hot water, to avoid sexual intercourse, suppression of natural urges, exercise, excessive speech, uneven sitting and lying postures, exposure to wind, cold, heat, dust, anger and grief.

Grading of Assessment: All the results were analyzed on the basis of mean (x) and Paired Proportion test has been used to find the significance of proportion in paired data.

OBSERVATIONS AND RESULT: A single group of 30 patients were selected according to their signs and symptoms in accordance with Ardhavabhedaka (migraine). The observations quoted from here onwards include the data of 30 subjects, who had completed the entire treatment and follow up period.

Study Design: An observational clinical study

Patients with the age group of 20- 30 years were the large group about 33% (10 pts). Followed by the age group of above 40 years with 30 % (9 Pts). 8 pts (26.7 %) were in the age group of 31-40 years. Only 3 Pts (10%) were below 20 years of age. 23 pts i.e 76.7% were Females and 7 pts (23.3 %) were Males.Occupation- frequency distribution of patients studied :- 16 patients (53.3%) were belonging to Sedentary Life style. 11patients (36.7 %) life style was Physical Labour. Only 3 patients (10%) belonged to Active lifestyle. Econ Stat- frequency distribution of patients studied 14 patients (46.7%) were belonging to Poor economic status. 10patients (30. %) were belonging to Middle Class. Only 6 patients (20%) belonged to Upper Middle class economic status. Food Habits- frequency distribution of patients studied: 15 (50%) patients were vegetarians and 15 patients (50%) belong to Mixed diet pattern.

Table 04: Frequency of Attack

Frequency of Attack	F Before Treatment	F During Treatment	F After Treatment	F During Follow up	% Difference
0	0(0%)	1(3.3%)	2(6.7%)	9(30%)	30.0%
1	5(16.7%)	4(13.3%)	20(66.7%)	18(60%)	43.3%
2	11(36.7%)	11(36.7%)	6(20%)	3(10%)	-26.7%
3	9(30%)	13(43.3%)	2(6.7%)	0(0%)	-30.0%
4	5(16.7%)	1(3.3%)	0(0%)	0(0%)	-16.7%
Total	30(100%)	30(100%)	30(100%)	30(100%)	-

P<0.001**, paired proportion test, Improvement of 73.3% at frequency of attack at 0 (30.0%) and 1 (43.3%)

Table 05: Teevrata of Shula

Teevrata of Shula	T Before Treatment	T During Treatment	T After Treatment	T During Follow up	% Difference
0	0(0%)	0(0%)	1(3.3%)	4(13.3%)	13.3%
1	1(3.3%)	6(20%)	11(36.7%)	21(70%)	66.7%
2	12(40%)	18(60%)	16(53.3%)	5(16.7%)	-23.3%
3	11(36.7%)	5(16.7%)	2(6.7%)	0(0%)	-36.7%
4	6(20%)	1(3.3%)	0(0%)	0(0%)	-20.0%
Total	30(100%)	30(100%)	30(100%)	30(100%)	-

P<0.001**, paired proportion test, Improvement of 80.0% at Teevrata itensity of attack at 0 (13.3%) and 1 (66.7%)

Table 06: Duration of Shula

Duration of Shula	D Before Treatment	D During Treatment	D After Treatment	D During Follow up	% Difference
0	0(0%)	2(6.7%)	3(10%)	8(26.7%)	26.7%
1	4(13.3%)	7(23.3%)	20(66.7%)	22(73.3%)	60.0%
2	10(33.3%)	12(40%)	7(23.3%)	0(0%)	-33.3%
3	13(43.3%)	9(30%)	0(0%)	0(0%)	-43.3%
4	3(10%)	0(0%)	0(0%)	0(0%)	-10.0%
Total	30(100%)	30(100%)	30(100%)	30(100%)	-

P<0.001**, paired proportion test, Improvement of 86.7 % at Duration of attack at 0 (26.7%) and 1 (60.0%)

Table 07: Nausea

Nausea	N Before Treatment	N During Treatment	N After Treatment	N During Follow up	% Difference
0	8(26.7%)	14(46.7%)	24(80%)	26(86.7%)	60.0%
1	22(73.3%)	16(53.3%)	6(20%)	4(13.3%)	-60.0%
Total	30(100%)	30(100%)	30(100%)	30(100%)	-

P<0.001**, paired proportion test, Improvement of 60.0% regarding Nausea at 0 (60.0%)

Table 08: Vomiting

Vomiting	V Before Treatment	V During Treatment	V After Treatment	V During Follow up	% Difference
0	0(0%)	1(3.3%)	2(6.7%)	9(30%)	30.0%
1	3(10%)	3(10%)	20(66.7%)	19(63.3%)	53.3%
2	16(53.3%)	20(66.7%)	7(23.3%)	2(6.7%)	-46.6%
3	10(33.3%)	6(20%)	1(3.3%)	0(0%)	-33.3%
4	1(3.3%)	0(0%)	0(0%)	0(0%)	-3.3%
Total	30(100%)	30(100%)	30(100%)	30(100%)	-

P<0.001**, paired proportion test, Improvement of 83.3% relief in Vomiting at 0 (30.0%) and 1 (53.3%)

Table 09: Photophobia

Photophobia	P Before Treatment	P During Treatment	P After Treatment	P During Follow up	% Difference
0	13(43.3%)	22(73.3%)	29(96.7%)	29(96.7%)	53.4%
1	17(56.7%)	8(26.7%)	1(3.3%)	1(3.3%)	-53.4%
Total	30(100%)	30(100%)	30(100%)	30(100%)	-

P<0.001**, paired proportion test, Improvement of 53.4% regarding Photophobia at 0 (53.4%)

Table 10: Shabdaasahishnuta

Shabdaasahishnuta	S Before Treatment	S During Treatment	S After Treatment	S During Follow up	% Difference
0	7(23.3%)	14(46.7%)	25(83.3%)	29(96.7%)	73.4%
1	23(76.7%)	16(53.3%)	5(16.7%)	1(3.3%)	-73.4%
Total	30(100%)	30(100%)	30(100%)	30(100%)	-

P<0.001**, paired proportion test, Improvement of 73.4 Shabdaasahishnuta at 0 (73.4%)

Overall response-12(40.0%) patients showed AVERAGE response, 10(33.3%) Patients showed ABOVE AVERAGE response, 8(26.7%) Patient showed BELOW AVERAGE response.

DISCUSSION

Migraine is now recognized as a chronic illness, not mere simply as headache. Migraine is the most common vascular headache. The prevalence rate of the disease

in India is 16-20% and the disease greatly affects the quality of life. Research indicates that migraine also increases the risk for other types of heart problems. The diagnosis is based only on the history narrated by patient. WHO has ranked Migraine among the world's most disabling medical illness. The scope for prevention of the disease in modern science is not satisfactory. Hence, an attempt has been made to study the complete aspect of disease and to find the best possible way for the betterment of mankind.

PROBABLE MODE OF ACTION OF DASHAMOOLADI KWATHA YOGA

All Shiro-rogas are due to tridosha prakopa and chiefly due to Vata or Vata-Kapha. Thus, Ardhavabhedaka, a sadhya type of Shiro-roga can be best managed with ausadhis having Ushna, Snigdha, etc Vatahara or Vata-Kaphahara properties. For the present study, Nasya with Dashamoola Kwatha Yoga which is having, anti-oxidant, anti-inflammatory properties and Vata-Kaphara quality was taken.

Ushna Virya has Deepana – Pachana, Virechana, Vilayana property, which softens and liquefies the morbid doshas which are ultimately expelled out due to Virechaka Karma.

• Snigdha Guna, Madhura Vipaka and Madhura Rasa having the property Srushtavinamutra, which enhances the process of softening and liquification.

• Snigdha Guna has Kledana Karma which acts as a binding agent.

• Laghu Guna and Tikshna Guna have Sroto-shodhaka property, which helps in expelling the morbid doshas. These Guna also have the property of Urdhavabhaga-doshaharatva, which breaks the Samprapti at Prasaravastha, where Vata alone or Kapha along with Vata causes Urdhavagapravriti of vitiated doshas.

• The Deepana – Pachana, Chedana – Bhedana Karma of Lavana Rasa enhances the Shodhana process.

• Guru Guna is Balya and Truptikara. It strengthens the efficacy of dhatu by providing proper nourishment. It prevents/restricts or counteracts the excess Shodhana Karma.

• Due to Sara Guna and Sukshma Guna the Nasya Dravya can reach to each and every dhatus.

Most of the contents in Dashamoola Kwatha Yoga is having Shothahara,Vedanasthapana, Deepana, Pachana and Tridoshashamaka Karma.

CONCLUSION

On the basis of study of review of literature, observations noted during study, findings collected after clinical trial and the results obtained after statistical analysis, the following conclusions are drawn.

-Migraine is a challenging disease to diagnose as it is a clinical diagnosis based on symptoms that are subjective and verifiable only by the patient.

-Most Migraine headaches are characterized by severe throbbing pain on one or both sides of the head (which may move to the other side), nausea, vomiting, dizziness and visual disturbances caused by dilation and constriction of the blood vessels in the head.

-Patients from 21-40 years of age group, females, and middle class people were more prone to Migraine.

-Migraine sufferers had acute onset with severe intensity and unilateral episodic pain with continuous rhythm.

-Dashamoola Kwatha Yoga Nasya was having significant improvement on all the parameters

like improvement in severity (80%), duration (86.7%) and frequency (73%) of headache, 60% relief in Nausea, 83.3% in Vomiting, 53.4% in Photophobia and 73.4% in Shabdaasahishnuta.

- In nutshell, Nasya proved to be a good effective therapy in curing the disease.

REFERENCES

1. Sushruta. Sushruta samhita- with English translation of text and Dalhana's commentary along with critical notes edited and translated by P.V.Sharma, Reprint. Varanasi: ChowkhambhaVishwabharathi publications; 2005. 695pp. vol 2.

2. Sushruta. Sushruta samhita- with English translation of text and Dalhana's commentary along with critical notes edited and translated by P.V.Sharma, Reprint. Varanasi: ChowkhambhaVishwabharathi publications; 2005. 696pp. vol I.

3. Sushruta. Sushruta samhita- with English translation of text and Dalhana's commentary along with critical notes edited and translated by P.V.Sharma, Reprint. Varanasi: Chowkhambha Vishwabharathi publications; 2005. 695pp. vol 2.

4. Agnivesha. Charaka Samhita Text with Hindi translation commentary by Pt. Kashinath Shastri, edited by Gangasahay Pandey, 8th ed. Varanasi: Chaukhambha Sanskit Samsthan; 2004. 920pp.Vol I.

5. Steiner TJ et al. migraine: the seventh disabler, the journal of headache and pain 2013

6. Wolff HG: Headache and other head pain, ed. 2, New York, Oxford University Press, 1963

7. Kunkel RS (1991): Diagnosis and treatment of muscle contraction headache (tension type). Med. Clin. North America.

8. Chakrapani: Ayurveda Dipika Commentary on Charaka Samhita, Edited by YadavajiTrikamji Acharya. Chaukhambha Sanskrit Sansthana, Varnasi.

9. Agnivesha. Charaka Samhita Text with English translation and critical exposition based on Chakrapanidatta's Ayur Dipika by Ramkaran Sharma and Vaidya Bhagwan Das, Reprint, Varanasi: Chowkhambha Sanskrit Series Office; 2005. 221pp. Vol 5.

10. Chakrapanidatta. Chakradatta- Hindi commentary by Indradeva Tripathi, edited by Prof. Ramanath Dwivedi, Reprint. Varanasi: Chowkhambha Sanskrit Sansthan; 2005. Kiyantashirasiyeya 17/10.242pp.

11. Headache Classification Committee of the International Headache Society, Classification and diagnostic criteria for headache disorders. Cranial neuralgia and facial pain, Cephalagia 1988.

CORRESPONDING AUTHOR

Dr Nithya K N
PG Scholar, Dept of Panchakarma, Ramakrishna Ayurveda Medical College and Hospital, Bengaluru, Karnataka
Email: drnityakn@gmail.com

Source of support: Nil
Conflict of interest: None Declared

Cite this article as
Dr Nithya K N : Clinical Evaluation of Dashamooladi Kwatha Yoga Nasya in the Management of Ardhavabhedaka With Special Reference to Migraine
VI(5): 1905-1915